

**Report 10300-23
August 1995**

**Earth Observing System (EOS)
Advanced Microwave Sounding Unit-A (AMSU-A)
Monthly Report for July 1995**

**Contract No: NAS5-32314
CDRL 529: (Including CDRL 203, 204, and 503)**

Submitted to:

**National Aeronautics and Space Administration
Goddard Space Flight Center
Greenbelt, Maryland 20771**

Submitted by:

**Aerojet
1100 West Hollyvale Street
Azusa, California 91702**

Section 1

INTRODUCTION

This is the thirty-first monthly report for the Earth Observing System/Advanced Microwave Sounding Unit-A (EOS/AMSU-A), Contract NAS5-32314, and covers the period from 1 July 1995 through 31 July 1995. This period is the nineteenth month of the Implementation Phase which provides for the design, fabrication, assembly, and test of the first EOS/AMSU-A, the Protoflight Model.

Included in this report is the EOS/AMSU-A & Combined Program Design Phase Schedules (Section 2); a report from the Product Team Leaders on the status of all major program elements (Section 3); Drawing status (Section 4); Contract Data Requirements List (CDRL) 503, the weight and power budgets (Section 5); CDRL 204, reporting on the activities of Performance Assurance (Section 6); CDRL 203, the Configuration Management Status Report (Section 7); the Documentation/Data Management Status Report (Section 8), and the Contract Status (Section 9).

Section 2

MASTER SCHEDULE

The EOS/AMSU-A & Combined Program Design Phase Schedule is presented as Appendix A.

Section 3

STATUS REPORTS

This section consists of program highlights during the month of June; a compilation of the weekly reports from Systems engineering and the Product Team Leaders for the Antenna, Receiver, Electronics, Mechanical and Thermal engineering, and the status of program action items.

3.1 Highlights. The following major activities took place this month.

3.1.1 Program team re-location. All key members of the new combined team (approximately 45 people) were co-located in Building 170 in mid July, as scheduled.

3.1.2. Program priority list. An overall priority list was established for the combined program team and co-ordinated with GFSC. This list will be reviewed and revised monthly or more often as necessary to ensure that the most urgent issues receive the necessary attention. For the month of July, the following priorities were established in order of decreasing priority:

1. Fact finding and negotiations
2. Surveillance & control of critical suppliers that are on contract or letter contract.
3. New subcontract awards
4. Current EOS design tasks
5. Support detailed MRP/Schedule Development

3.1.3 Design Review schedules. Internal design reviews and table-top critical design reviews are planned for the components. Table I shows the table top CDR schedule.

Table I Design Review Status

TABLE-TOP CDR SCHEDULE					
PRODUCT	EOS- UNIQUE	METSAT - UNIQUE	COMMON	RESPONSIBILITY	DATE
PLO			X	Thompson	8/22/95
A1 Structural Design	X			Ely	Complete
New Signal Processing CCAs	X			Haapala	9/06/95
Software (Full CDR)	X			Schwantje	TBD by S/W/Project

3.1.4 Action items. Table II summarizes the status of the integrated AMSU-A action items.

Table II Integrated AMSU-A Action Item Status

	A	B	C	D	E	F	G
1	A - Contract Delivery Due, Urgent to Customer, IPT formation, or Organization						
2	B - Urgent to Integrated Program Negotiations, EOS Transition, or Award Fee						
3	C - Urgent to Integrated Program Start-up. D - Routine						
4	AI #	Prior ity	Title	ACTION ITEM	RESPONSIBLE	SUPPORT	DUE DATE
5	Sort:	3			1	2	
6	5/19-7A	A	Organization	ratify mission, etc. WRITE LETTER	All		
7	6/16-4	C	Drawing status	Ref. pg 7 of 6/8/95 weekly report. Present plan or schedule for new/modified METSAT drawings.	Chapman		10-Jul
8	6/16-2	B	NASPR	Ref. pg 3 of 6/8/95 weekly report. Write NSPAR on PLO board that is not in compliance with MIL-STD-275 "x-y Grid" requirements.	Chapman	Lorenz/Frey	19-Jul
9	5/12-19b	A	PC Requirements	Get key team members on-to LAN, E-Mail, Sch+	Craig	Tran	
10	6/16-9	D	Drawing status	Ref. pg 25 of 6/8/95 weekly report. Add disposition date column.	Hauerwaas		1-Aug
11	6/16-11	A	Table Top CDR definition/clarification	Send letter to NASA via contracts to clarify/define the content of Table Top CDRs in context of NASA definition of Incremental CDRs. (Coordinate Draft with NASA Programs first)	Hauwerwaas	Howell, Woodington	22-Jun
12	5/12-28	C	Negotiation Prep	DEVELOP C-AMSU SHOULD COST.	HOWELL		
13	5/19-1A	C	Planning	C/SCSC budget plan	IPT TL		30-Jul
14		D	Staffing	IDENTIFY REQUIREMENTS FOR TEAM MENTOR.	IPTs		
15	6/2-4	A	Pre-award surveys	Schedule remaining Critical Component Surveys	Mehrtretter	IPTs	28-Jun
16	5/19-9a	C	Training	Schedule next ZM class for PMS & IPT leaders	Mehrtretter	IPTs, Alternus-B	25-Jul
17	6/16-8	C	Critical path slack	Ref. pg 18 of 6/8/95 weekly report. Clarify the delivery date(s) that defines critical path slack column.	Mehrtretter		1-Aug
18	5/12-8	B	NASA 10 May meet	BREAKOUT MAKE-UP OF 24.9% MANAGEMENT.	MEHLTRETTER	WHITE	
19	5/19-13	C	Meeting Schedules	Establish format & schedule for IPT progress reviews	PM		30-Jul
20	5/12-6	C	NASA request, NASA-Hybnr 11 May meeting	ADD ESD REQUIREMENTS TO SUBCONTRACTS (EITHER USE 5300.3L OR AE-25089 (IF NASA APPROVED))	SHERMAN	TAYLOR	10-Jul
21	5/19-6H	C		Review Materiel Bid & transfer to IPT	Sherman		28-Jul
22	7/18-1	A	Supplier Quotes for ESD Requirements	Ref 5/12-6: Obtain quotes for 5300.3L requirements from Litton, Millitec, Spaceck, FEI, & Phonon	Sherman	IPTs/Taylor	
23	5/12-7	B	NASA request, NASA-Hybnr 11 May meeting	OBTAIN COPIES OF NEW WORKMANSHIP STANDARDS AND SUBMIT ONE COPY TO BILL DANNEY (KEEP ONE COPY FOR FILE).	TAYLOR		27-Jul
24	6/16-3	D	NSPAR Status sheet	Ref. pg 5 of 6/8/95 weekly report. Add a column that identifies NSPAR number for each activity.	Taylor		1-Aug
25	6/16-14	A	Design Audit Prop	Complete Design Audit Proposal	White		27-Jun
26	5/31-5	C	Metric	Develop a metric that compares full-time vs total hours charging to AMSU.	White	Mehrtretter	29-Jun
27	5/19-8	B	Organization	Charging Rules - define rules for charging to EOS, KLM, METSAT early start, B&P, Training	White	Mehrtretter	11-Jul
28	5/19-6I	B	Negotiation Prep	Update Actuals	White		14-Jul
29	5/12-9	B	NASA 10 May meet	DETERMINE AND SUBMIT TO NASA % OF SUPERVISION BY FUNCTIONAL GROUP.	WHITE		
30	5/19-6K	B	Negotiation Prep	Review WBS, Understand NASA concerns, understand IPT desire to streamline reporting structure, propose solutions	White, WEM, BM, CW, NASA		6-Jul

3.2 Weekly reports

3.2.1 Systems engineering Following are Systems engineering's weekly reports.

AMSU-A WEEKLY REPORT FOR WEEK ENDING 06 JULY 1995

**GENCORP
AEROJET**

System Engineering

- **MRP First Pass Complete**
- **DC/DC Converter Specification Reviewed and Redlined**
 - Updated Channel 15 GDO outputs requirements
 - Reduced Power Allocation
 - Relaxed Ripple Requirements
 - Resolved Cable Shielding Requirements for A2
- **Attended METOP Interface Meeting**
 - Completion Date for Action Items Will be Determined by July 18 1995
- **PRT Specification Reviewed and Redlined**

AMSU-A SYSTEM ENGINEERING INTEGRATION AND TEST (SEIT) TEAM WEEKLY REPORT FOR WEEK ENDING 13 JULY 1995

**GENCORP
AEROJET**

**Provided Comments and Correction to Notes Generated by
NASA/Aerojet During Integrated AMSU-A SEIT Bid Fact Findings**

Recommended Changes to GSFC-S-480-80 Specification

Tested Two MicroVAX's Provided by NASA

- Both Do Not Boot Up
- Aerojet Recommends Not To Use These MicroVax's
- Need NASA's Direction To Troubleshoot by DEC and Aerojet
- One MicroVAX was Mechanically (Shipping Damage) Fixed

GSE Internal Design Review

- Review Package Will Be Distributed by 20 July 1995
- Review Will Be Scheduled During 1st Week of August 1995

**AMSU-A SYSTEM ENGINEERING INTEGRATION
AND TEST (SEIT) TEAM WEEKLY REPORT
FOR WEEK ENDING 13 JULY 1995 (CONTINUE)**

**GENCORP
AEROJET**

CONFIGURATION/DATA MANAGEMENT

Incorporated 60% of Outstanding Documentation Audit ECNs

**Audited and Corrected EOS/AMSU-A BOM in MRP for Accuracy of P/N
and Quantities**

Entered Critical Spares List for METSAT/AMSU-A in MRP

Developed 250% Spares List for METSAT/AMSU-A in MRP

Released Four Drawings and Three ECNs

Distributed Vernitron and COI SDRLs for Comment/Approval

SDRL Status and Tracking Matrix is being Developed

**AMSU-A SYSTEM ENGINEERING INTEGRATION
AND TEST (SEIT) TEAM WEEKLY REPORT
FOR WEEK ENDING 20 JULY 1995**

**GENCORP
AEROJET**

Updated Calibration Log Books

Redlined O&M Manual to Incorporate the Testing in Shipping Container

Generated Usability Matrix for MicroVAX Equipments Provided by NASA

**Provided Counts to Temperature Conversion Data to
NASA/Lockheed-Martin for All Engineering and Flight Models
on Six High Density 1.44 MB Diskettes and One TK50 Tape**

METOP Action Items will be Completed by August 7 1995

Incorporated 76% of Outstanding Documentation Audit ECNs

Submitted Three CDRLs to NASA on Schedule

Released Thirteen Drawings

Distributed Litton SDRLs for Comments/Approval

**AMSU-A SYSTEM ENGINEERING INTEGRATION
AND TEST (SEIT) TEAM WEEKLY REPORT
FOR WEEK ENDING 27 JULY 1995**

**GENCORP
AEROJET**

Participated and Provided Data For AMSU-A Cost Fact Finding

Participated In EOS/AMSU-A1 Mechanical/Thermal Design Review

Distributed EOS/AMSU-A IGSE Internal Design Review Package

**EOS/AMSU-A IGSE Internal Design Review will be Scheduled during
2nd Week of August**

Distributed Amplica, FEI, Phonon SDRL for Comments/Approval

Submitted Three CDRL to NASA

Released Four Drawings

Completed STE Software Detail Design Document (CDRL 306-5)

**Draft Copies of Firmware & Software Test Plans have been Completed
(CDRL 33)**

3.2.2 Antenna subsystem Following are the Antenna subsystem weekly reports:

EOS/AMSU-A Weekly Report For Week Ending 7/06/95

GENCORP
AEROJET

- **Antenna Subsystem**
 - **Accomplishments Last Week**
 - **Discussions With MEC**
 - MEC Will Start Fab Of Prototype A1-2 Feedhorn After Plant Shutdown- 7/03/95 Thru 7/16/95
 - MEC Will Provide New Plan For Completion Of Beamwidth Study
 - MEC Concerned That Delay Of Multiplexer/Feedhorn Procurement Will Affect Their Ability To Meet Schedule- Would Like To Start A2 Feedhorn And Diplexer And A1 Multiplexers ASAP
 - Ball Aerospace Will Use Aerojet Procedure AE-206060A , Paragraphs 1., 2., 3.1, 3.2, 3.3.1, 3.3.2.5, 3.3.2.6, 3.4, 3.5, 4., And 5. For The Cleaning And Lubrication Of The Barden Bearings- No Internal Procedures Will Be Used

EOS/AMSU-A Weekly Report For Week Ending 7/06/95

GENCORP
AEROJET

- **Planned Activities For This Week**
 - **A2 Reflector- COI Cannot Guarantee That VDA Coating Will Meet Solar Absorptivity Requirements**
 - Test Coupons Will Be Supplied To VDA Supplier For Coating
 - IR Emissivity And Solar Absorptivity Measurements Will Be Run At Aerojet
 - **Motors/Resolvers- Hall Effect Devices Have Not Been Qualified For Cosmic Ray Fluence Effects, i.e. Single Event Latchup, Upset Or Burnout**
 - Survey Of Space Flight History Of The Optek OMH 2006 Device Is Being Conducted
 - Effect Of Single Event Latchup And Upset On Motor Performance Is Being Studied
- **Critical Issues**
 - None

EOS/AMSU-A Weekly Report For Week Ending 7/13/95



- Planned Activities For This Week**
 - Prepare For Table-Top MRR's For A2 Motor Housing, A2 Secondary Mirror, A1 And A2 Motor Shafts
 - Attend Meeting At Vernitron To Clean-Up Their Materials And Processes List
 - Complete Review Of Vernitron And COI SDRLS
 - Track Warm Load Enclosure Fabrication- Completion Estimated Mid-August
- Critical Issues**
 - None

EOS/AMSU-A Weekly Report For Week Ending 7/20/95



- **Antenna Subsystem**
 - Accomplishments Last Week**
 - **Motors/Resolvers**
 - Conducted Materials/Processes Review At Vernitron
 - Two Heritage Materials Exceed Outgassing Specification- Need Approval For Their Use Or Optional Gold Plating For Corrosion Protection
 - Need Approval Of Vernitron Soldering Procedure In Place Of NHB Certification
 - **A2 Reflector**
 - VDA Samples Have Been Started At Vendor- Will Be Sent To Aerojet This Week
 - **Beamwidth Clustering**
 - A1-2 Feedhorn Fabrication Complete
 - A1-1 Feedhorn Rework Begun
 - **Warmload Fabrication Begun**

EOS/AMSU-A Weekly Report For Week Ending 7/20/95

**GENCORP
AEROJET**

- **Planned Activities For This Week**
 - MRR's For Motor Shafts And Motor Housings To Be Held Monday (Drawing Review) And Wednesday (Shop Order Review)
 - Continue Reviewing Motor/Resolver And A2 Reflector SDRL's
 - MEC To Complete All Feedhorn Fabrication And Feedhorn Tests
- **Critical Issues**
 - None

AMSU-A Weekly Report For Week Ending 7/27/95

**GENCORP
AEROJET**

- **Antenna Subsystem**
 - **Accomplishments Last Week**
 - Motors/ Resolvers
 - Vemitron Soldering Procedure In Review At Aerojet
 - MRR For Resolvers At Vemitron Waiting NASA Approval Of PO Package
 - A2 Reflector
 - First Set Of VDA Samples Received And Tested At Aerojet- E-Beam Method Produced Satisfactory Results
 - Second Set Of Samples To Be Tested This Week
 - Beamwidth Clustering
 - MEC Completed Fabrication And Successful Pattern Tests Of The A1-1 And A1-2 Feedhorns
 - Warmload Fabrication
 - All Material In House
 - Shop Orders Upgraded

AMSU-A Weekly Report For Week Ending 7/27/95



- Planned Activities For This Week**
 - A2 Reflector
 - Complete Testing Of Second Set Of VDA Samples
 - COI Needs Relief On Thermal-Vacuum Testing Of Reflectors
 - Limited COI Facility Will Cause Schedule Problems
 - COI Proposes Thermal-Vacuum Testing The Qual Model Only Then Thermal Cycling The Rest After Prolonged Vacuum Dryout
 - Beamwidth Clustering
 - Pattern Testing Of Feedhorn Reflector Assemblies Will Begin- To Include Both A1-1 And A1-2 Feedhorns And Two Reflectors
 - Warmload Fabrication
 - Shop Orders To Be Approved By QA
 - Fabrication To Start By Wednesday
- Critical Issues**
 - None

3.2.3 Receiver subsystem. Following are the Receiver subsystem weekly reports:

**AMSU-A WEEKLY REPORT
FOR WEEK ENDING 7/7/95**

**GENCORP
AEROJET**

RECEIVER SUBSYSTEM

- Accomplishments for the last two weeks
 - Amplica is on contract (approved) for I.F. Amplifiers.
 - Millitech is on contract (approved) for CH 15 GDO.
 - Daden contract is waiting for NASA approval for power dividers.
 - Assisted in refinement of DC-DC converter specification - reflects final component specification revisions and vendor requirements.
 - DPA from High Rel Labs concerning Litton varactor diode completed. Analysis in progress to determine failure mechanism.
 - Electrical testing of PLO is 75% complete. Qual. level vibration testing was successful.
 - PLO NSPAR approved for plastic encapsulated sampling phase detector
 - Numerous contacts with J. Solman has him up to date with PLO.
 - Power divider specification (AE 24867B) was released.

**AMSU-A WEEKLY REPORT
FOR WEEK ENDING 7/7/95**

**GENCORP
AEROJET**

RECEIVER SUBSYSTEM

- Accomplishments for the last two weeks (continued)
 - Conducted vendor support meeting. Team concluded that a quality representative will travel to Litton for 2 weeks and report progress. Additional support will be provided as needed. A similar approach will be used for Spacek and Phonon in the coming weeks.
 - New I.F. Attenuator drawing (1356886) in process to support attenuator kits for all channels.

AMSU-A WEEKLY REPORT FOR WEEK ENDING 7/7/95

GENCORP
AEROJET

RECEIVER SUBSYSTEM

- Planned Activities For This Week

- Submit redlines (final release) of specifications for:
CH15 GDO AE-26671 (Millitech)
I.F. Amplifier AE-24684C (Amplica)
- Attend PDR at FEI for TCXO (frequency reference for PLO)
- Present PLO Technology Review for Ramsier
- Analyze DPA data from High Rel. Labs regarding varactor diode failure
- Support MRP activities for receiver team
- Move to building 170 (co-location)
- Determine T/V chamber modifications for PLO temperature tests
- Update I.F. Amplifier drawing (1331579) to incorporate location of DC bias terminals

AMSU-A WEEKLY REPORT FOR WEEK ENDING 7/14/95

GENCORP
AEROJET

RECEIVER SUBSYSTEM

- Accomplishments for the last week

- Attended PDR at FEI for the TCXO - Presentation went well
 - no technical action items
 - all but 3 piece part in house
 - EEE parts board issue needs resolution
- Determined hardware and labor needed to perform thermal vacuum tests on PLO - plan reported to NASA
- MRP activities initiated on receiver/PLO assembly build -
MRP being updated for new receiver parts (buy items)
- Litton PDR set for Aug 3
- Sent data package to J. Solman
- DRO & PLO block diagrams annotated with power levels and limits
- Sampling phase detector data characterization for SPD1 & SPD2 presented in table form

AMSU-A WEEKLY REPORT FOR WEEK ENDING 7/14/95

**GENCORP
AEROJET**

RECEIVER SUBSYSTEM

- **Accomplishments for the last week (continued)**
 - Generated risk mitigation plan for AMSU receiver shelves
 - Prepared for Millitech fact finding visit
 - Approved slight height increases for channel 1 & 2 DROs -
no effect on w/g location or mounting, weight and volume O.K.
 - Provided Aerojet full time quality support at Litton
 - Redlined I.F. Amplifier drawing to specify DC terminal location

AMSU-A WEEKLY REPORT FOR WEEK ENDING 7/14/95

**GENCORP
AEROJET**

RECEIVER SUBSYSTEM

- **Planned Activities For This Week**
 - Attend technical interface and fact finding at Millitech concerning
the channel 15 GDO - prepare report
 - Continue to analyze DPA data from High Rel. Labs regarding
varactor diode failure
 - Send PLO MM&T ATP (table IV) results to J. Solman
 - Initiate parts procurement for PLO thermal-vac test fixture
(w/g pressure window, thermal plate, thermocouple feed through)
 - Complete co-location move
 - Submit redlines (final release) of specifications for: *
CH15 GDO AE-26671 (Millitech)
I.F. Amplifier AE-24684C (Amplica)
 - Continue discussion on CH15 GDO backup position

* slip from last week

EOS/AMSU-A Weekly Report For Week Ending 7/20/95

**GENCORP
AEROJET**

- **Receiver Subsystem**
 - **Accomplishments Last Week**
 - Attended technical interface and fact finding discussions regarding the channel 15 GDO
 - Reviewed varactor, from MM&T VCGDO, DPA results and compared to possible failure scenarios
 - Sent MM&T ATP results to J. Solman (see attached memo)
 - Product specifications AE-26671(ch 15 GDO) and AE-24684C (I.F. amps) in final release cycle
 - Completed MRP phase 1 schedule for receiver subsystem

EOS/AMSU-A Weekly Report For Week Ending 7/20/95

**GENCORP
AEROJET**

- **Planned Activities For This Week**
 - Generate report documenting channel 15 technical interface and fact finding session at Millitech
 - Complete MRP phase 2 schedule for receiver subsystem
 - Document DPA results and possible failure mechanisms for failed varactor
 - Interface with Litton regarding Aug. 3 PDR
 - Interface with FEI regarding EEE parts issues
 - Review A1-1 and A2 receiver drawings
 - Review Quality Assurance plan from Phonon
- **Critical Issues**
 - None

AMSU-A Weekly Report For Week Ending 7/27/95

**GENCORP
AEROJET**

- **Receiver Subsystem**
 - **Accomplishments Last Week**
 - Generated report documenting channel 15 technical interface meeting and fact find held at Millitech
 - Documented results of varactor diode DPA
 - Completed MRP phase 2 schedule for receiver subsystem
 - Interfaced with Litton regarding PDR. PDR is scheduled for 8/9/95
 - Held telecon with FEI regarding NSPARs and EEE parts list. FEI will make corrections and additions, and resubmit
 - Reviewed A1-1(1356429) and A2 (1356441) drawing tree and supported CCB/DAB meeting
 - Reviewed quality assurance plan for Phonon
 - Disposition of SAW grounding scheme
 - Provided nominal power requirements for DC-DC converter to system engineering

AMSU-A Weekly Report For Week Ending 7/27/95

**GENCORP
AEROJET**

- **Receiver Subsystem (con't)**
 - Held quality interface meeting with Metelics regarding Sampling Phase Detector
 - PLO Vacuum Tests
 - Pressurized waveguide windows received
 - Blank bell jar flanges machined to accommodate waveguide flanges
 - Test equipment order submitted to EMC
 - **Planned Activities For This Week**
 - Coordinate with Litton regarding PDR
 - Continue to interface with Litton regarding their progress
 - Generate memo documenting current surface mount technology manufacturing line qualification process as understood by Aerojet's discussion with Unisys
 - Review Spacek quality plan

**AMSU-A Weekly Report
For Week Ending 7/27/95**



-
- **Receiver Subsystem (con't)**
 - Continue to work long lead piece parts issues
 - Fixture PLO vacuum measurements
 - Generate PLO vacuum measurements test procedure
 - **Critical Issues**
 - None

3.2.4 Electronics subsystem Following are the Electronics subsystem weekly reports:

EOS/AMSU-A WEEKLY REPORT FOR WEEK ENDING 7/6/95

- **Electronics Team**

- **Accomplishments Last Week**

- » **Loaded Parts On 1553 Board**
 - » **Found Detector Failures & Sealing Leaks In MM&T ACC Detectors Sealed By Halcyon. Detector Failure Analysis Continuing**
 - » **Completed Drafting Of A1-W3 Cable Drawing**
 - » **Completed Draft of Update/Revision To DC-DC Spec**
 - » **Completed Update Revision To R/D Converter Spec**

EOS/AMSU-A WEEKLY REPORT FOR WEEK ENDING 7/6/95

- **Electronics Team (Cont.)**

Prototype CCA Status			
<u>CCA</u>	<u>Receive</u> <u>Parts</u>	<u>Load</u> <u>Parts</u>	<u>Test</u>
Analog Mux & ADC	C 4/27	C 5/18	C 6/15
Mux Relay Control	C 4/27	C 5/31	7/25
CPU	C 5/31	C6/15	7/13
1553 Interface	C 5/31	C7/6	7/20
Pwr Control (EOS)	C7/5	7/11	7/25
Pwr Control (METSAT)	Circuit Design - 8/18		Dwgs - 9/29
Relay Control (METSAT)	Circuit Design - 8/18		Dwgs - 9/29
C = Complete			

EOS/AMSU-A WEEKLY REPORT FOR WEEK ENDING 7/6/95

- **Electronics Team**

- **Planned Activities For This Week**

- » **Continue Fab Of TRU**
 - » **Test Prototype CPU Board**
 - » **Load Parts On Power Control CCA (EOS)**
 - » **Complete A2-W3 Cable Drawing**
 - » **Complete Transistor Assy Dwg Pkg**
 - » **Complete EMI Filter Bracket Dwg**
 - » **Hold Technical Interchange Mtg On DC-DC At FEI**
 - » **Hold PAA On PRT At Wahl**
 - » **Develop Detector Sealing Get-Well-Plan With ACC**
 - » **Complete First Pass Correction To MRP Signal Processor Indentured Parts List**

AMSU WEEKLY REPORT FOR WEEK ENDING 7/13/95

- **Electronics Team**

- **Accomplishments Last Week**

- » **Held Technical Interchange Mtg at FEI For DC-DC**
 - » **Completed Pre Award Audit At Wahl For PRT**
 - » **Completed Chasis Fab Of TRUs**
 - » **Parts Loading Of Prototype Power Control/Monitor CCA is 75% Complete**
 - » **Completed TRU Wiring Instructions**

AMSU WEEKLY REPORT FOR WEEK ENDING 7/13/95

- **Electronics Team (Cont.)**

Prototype CCA Status			
CCA	RCV PARTS	LOAD PARTS	TEST
Analog Mux & ADC	C 4/27	C 5/18	C 6/15
Mux Relay Control	C 4/27	C 5/31	7/25
CPU	C 5/31	C 6/15	7/18
1553 Interface	C 5/31	C 7/6	7/20
Pwr Control (EOS)	C 7/5	7/17	7/25
Pwr Control (METSAT)	Circuit Design - 8/18		Dwgs - 9/29
Relay Control (METSAT)	Circuit Design - 8/18		Dwgs - 9/29
C = Complete			

AMSU WEEKLY REPORT FOR WEEK ENDING 7/13/95

- **Electronics Team (Cont.)**

- **Planned Activities For this Week**

- » Complete Wiring of One TRU
- » Complete Loading Parts On Control/Monitor CCA
- » Start Check Out Of 1553 CCA
- » Incorporate Comments & Changes Into DC-DC Spec Resulting From Last Weeks Meeting
- » Begin Design Of METSAT Unique CCAs

AMSU WEEKLY REPORT FOR WEEK ENDING 7/20/95

• Electronics Team

– Accomplishments Last Week

- » Red lined DC-DC Spec To Incorporate Results Of Kick Off Mtg...Reviewing Derived Requirement to Regulate Down To 16v...Significant DC-DC Design Impact
- » Began Design Mod To Remove Redundant Wires From All Cables In Favor Of Redundant Pins Only
- » Completed Advanced Parts List For The Two New METSAT CCAs, Relay Driver CCA , And Power Relay CCA
- » Completed Parts Loading Of Prototype Power Control/Monitor CCA
- » Started TRU Wiring
- » Completed Drafting On:
 - EMI Filter Housing For Power Control/Monitor Assy
 - Transistor Assy
- » Proposed A New Detector Procurement Strategy

AMSU WEEKLY REPORT FOR WEEK ENDING 7/20/95

• Electronics Team (Cont.)

Prototype CCA Status			
CCA	RCV PARTS	LOAD PARTS	TEST
Analog Mux & ADC	C 4/27	C 5/18	C 6/15
Mux Relay Control	C 4/27	C 5/31	8/14
CPU	C 5/31	C 6/15	7/25
1553 Interface	C 5/31	C 7/6	8/1
Pwr Control (EOS)	C 7/5	C7/17	8/14
Pwr Control (METSAT)	Circuit Design - 8/18		Dwgs - 9/29
Relay Control (METSAT)	Circuit Design - 8/18		Dwgs - 9/29
C = Complete			

AMSU WEEKLY REPORT FOR WEEK ENDING 7/20/95

- **Electronics Team (Cont.)**
 - **Planned Activities For this Week**
 - » Complete Wiring of One TRU
 - » Complete CPU Board C/O
 - » Start Check Out Of 1553 CCA
 - » Start RF Shelf Wire Lists
 - » Start Design Of METSAT Cables
 - » Complete Audit & Correction Of METSAT Signal Processor MRP Data Base

AMSU-A WEEKLY REPORT FOR WEEK ENDING 7/27/95

**GENCORP
AEROJET**

- **Electronics Team**
 - **Accomplishments Last Week**
 - Completed Audit of EOS and METSAT Electronics Team indentured MRP assembly structure
 - Completed audit of MRP CCA electronics parts lists
 - Found wiring errors in the Signal Processor Test Set and repair is underway (this test box is required to complete the EOS analog prototype CCA checkout)
 - Started EOS Receiver wiring design
 - Completed review of EOS cable design drawings and returned to drafting for clean up

AMSU-A WEEKLY REPORT FOR WEEK ENDING 7/27/95

GENCORP
AEROJET

- **Electronics Team (Cont.)**

Prototype CCA Status			
CCA	RCV PARTS	LOAD PARTS	TEST
Analog Mux & ADC	C 4/27	C 5/18	C 6/15
Mux Relay Control	C 4/27	C 5/31	8/14
CPU	C 5/31	C 6/15	C7/25
1553 Interface	C 5/31	C 7/6	8/14
Pwr Control (EOS)	C 7/5	C7/17	8/14
Pwr Control (METSAT)	Circuit Design - C7/29		Dwgs - 9/29
Relay Control (METSAT)	Circuit Design - C7/29		Dwgs - 9/29
C = Complete			

AMSU-A WEEKLY REPORT FOR WEEK ENDING 7/27/95

GENCORP
AEROJET

- **Electronics Team (Cont.)**

- **Planned Activities For this Week**

- Complete functional checkout of Signal Processor Test Set (final C/O pending repair of unit)
- Release EOS backplane wire list dwg
- Audit MRP make and buy lead times
- Update master program plan to include all METSAT design activities
- Release updated PRT Spec to procurement for Buy

- **Critical Issues**

- R/D Converter procurement on hold pending NASA approval of updated spec (use of high value existing stock also in question)
- RF Detector procurement on hold pending NASA acceptance of proposed procurement strategy

3.2.5 Mechanical and Thermal engineering Following are the Mechanical and Thermal engineering weekly reports:

EOS/AMSU-A WEEKLY REPORT FOR WEEK ENDING 7/6/95

**GENCORP
AEROJET**

•Mechanical/Thermal Subsystem

-Accomplishments Last Week

- »Reviewed Sidemount IRs From NOAA Program - Only One Potentially Common Item (A Dimension)To Be Addressed With ECN Incorporation
- »Started ECN Incorporation In Sidemount Drawing
- »Started Shop Orders For Sidemount
- »Finished Checking A1-1 Receiver Assembly, PN 1356429
- »Continued Checking Other Two Receiver Assembly Drawings (A1-2 & A2)

-Planned Activities For This Week

- »Complete A1 Top Assembly Drawing & Send To Checking Dept.
- »Continue Incorporation Of ECNs in A1 Sidemount Drawing (PN1331552) And Sidemount Shop Orders
- »Prepare For A1 Mechanical/Structural/Thermal Table-Top CDR Scheduled For 19 July At Aerojet

-Issues

- »None

EOS/AMSU-A WEEKLY REPORT FOR WEEK ENDING 7/13/95

**GENCORP
AEROJET**

•Mechanical/Thermal Subsystem

-Accomplishments Last Week

- »Received Raw Material For Sidemount Parts
- »Continued ECN Incorporation In Sidemount Drawing
- »Continued Updating Shop Orders For Sidemount
- »Finished Checking A1 Antenna Subassy (Machined)
- »Prepared For A1 Mechanical/Structural/Thermal Internal And Table-Top CDRs

-Planned Activities For This Week

- »Complete A1 Top Assembly Drawing & Send To Checking Dept.
- »Continue Incorporation Of ECNs in A1 Sidemount Drawing (PN1331552) And Update Sidemount Shop Orders
- »Complete Internal CDR Preparations
- »Identify Additional Parts (Candidates) For Early Start Fabrication

-Issues

- »None

EOS/AMSU-A WEEKLY REPORT FOR WEEK ENDING 7/13/95

**GENCORP
AEROJET**

•Mechanical/Thermal Subsystem

-Accomplishments Last Week

- »Completed Internal And Table-Top CDR Preparations
- »Continued ECN Incorporation In Sidemount Drawing
- »Continued Updating Shop Orders For Sidemount
- »Completed A1 Top Assembly Drawing & Send To Checking Dept.
- »Completed Checking A2 Receiver Drawing
- »Identified Approximately 50 More Mechanical Parts As Early Start Candidates

-Planned Activities For This Week

- »Hold MRRs On 10 To 15 Mechanical Parts For Early Start
- »Continue Machining A1 Sidemounts
- »Complete Internal CDR On A1 Structure/Thermal Control
- »Complete Table-Top CDR For A1 Structure/Thermal Control

-Issues

- »None

AMSU-A WEEKLY REPORT FOR WEEK ENDING 7/27/95

**GENCORP
AEROJET**

•Mechanical/Thermal Subsystem

-Accomplishments Last Week

- »Completed Internal And Table-Top CDR Presentations
- »Completed MRRs On Six Additional Candidate Mechanical Parts For Early Start
- »Completed Drawing Reviews On 7 Mechanical Parts In Addition To 6 Above
- »Started Checking A1 Top Assembly Drawing
- »Released The Two Thermal ICDs

-Planned Activities For This Week

- »Publish The Minutes Of the Mechanical/Structural/Thermal CDR
- »Work On CDR Action Items
- »Revise Sidemount Shop Orders
- »Reschedule Upper Baseplate (Common) And Lower Baseplate (METSAT) Early Start Tasks To Be Compatible With Sidemount Schedule

-Issues

- »None

Section 4

DRAWING STATUS

Drawing status is shown in detail in Tables III through V and graphically in Figures 1 through 3. Drawing preparation is generally on schedule, but drawing release is lagging because of unanticipated design issues. Two new drawings were added to the list.

Table III New/Changed EOS Drawings, AMSU-A1 Only

NEW/CHANGED EOS DRAWINGS		GENERAL INFO		PLANNED/ACTUAL COMPLETION DATE						
DRAWING TITLE , NUMBER, AND ENDENTURE	Part No.	Make/Proc-ure	Resp Engineer	New/ NOAA	Planned Release to Drafting	Actual Release to Drafting	Planned Drawing Complete	Actual Drawing Complete	Planned Release	Actual Release
Drawings										
TwThFolFweSix										
DRAWINGS USED ON AMSU-A1 ONLY										
COVER, ACCESS, SIDEWALL	1331551-X	M	Ely	ECN	1/12/95	1/9/95	1/26/95	1/25/95	2/23/95	2/9/95
AMPLIFIER, IF	1331579-X	P	Ma	ECN	2/2/95	2/2/95	2/6/95	2/6/95	3/2/95	3/1/95
PANEL, SIDE, LEFT	1356626-1	M	Ely	New	1/9/95	1/9/95	1/26/95	2/6/95	3/6/95	4/20/95
BRACKET, SUPPORT, COAX	1337750-9	M	Ely	ECN	1/19/95	1/26/95	2/27/95	2/14/95	3/17/95	3/27/95
RF SHELF ASSY - A1-1	1331555-1	P	Ely	ECN	1/19/95	1/26/95	2/27/95	2/13/95	3/17/95	4/20/95
RF SHELF ASSY - A1-2	1331490-1	P	Ely	ECN	1/19/95	1/26/95	2/27/95	2/14/95	3/27/95	4/20/95
BASEPLATE ASSY, LOWER	1356405-1	M	Ely	New	1/3/95	1/3/95	2/20/95	2/21/95	3/30/95	4/27/95
PANEL, CONNECTOR	1356410-1	M	Ely	New	2/27/95	2/14/95	3/13/95	2/22/95	4/10/95	4/20/95
PANEL, CONNECTOR	1356411-1	M	Ely	New	2/27/95	2/14/95	3/13/95	2/22/95	4/10/95	4/20/95
DRIVE ASSY, REFLECTOR	1333640-4	M	Chapman	ECN	3/9/95	3/20/95	3/21/95	5/11/95	4/20/95	5/15/95
CALIB. SOURCE, WARMLOAD	1331380-X	M	Chapman	ECN	3/9/95	3/20/95	3/21/95	5/11/95	4/20/95	5/16/95
CARD CAGE ASSY	1331600-2	M	Ely	ECN	3/13/95	3/13/95	4/21/95	4/27/95	5/16/95	5/3/95
PANEL, AFT, UPPER	1331642-2	M	Ely	ECN	4/3/95	3/13/95	4/20/95	4/6/95	5/18/95	4/27/95
BASEPLATE, UPPER	1331356-X	M	Ely	ECN	5/1/95	5/1/95	5/31/95	5/31/95	6/15/95	6/15/95
PANEL, SUPPORT, RIGHT FRONT, UPPER	1331390-X	M	Ely	ECN	5/1/95	5/1/95	5/31/95	5/31/95	6/15/95	6/15/95
CARD CAGE ASSEMBLY (UPPER)	1331162-X	M	Ely	ECN	5/15/95	5/15/95	6/15/95	6/15/95	7/20/95	
PANEL, FRONT, UPPER	1331352-1	M	Ely	ECN	5/15/95	5/15/95	6/15/95	6/15/95	7/20/95	7/25/95
PANEL, TOP	1356866-1	M	Ely	New		X	5/9/95	5/9/95	6/7/95	6/7/95
POWER DIVIDER, 3-WAY	1356669-1	P	Ma	New	2/2/95	2/2/95	2/6/95	2/6/95	5/25/95	6/13/95
POWER DIVIDER, 4-WAY	1356670-1	P	Ma	New	2/2/95	2/2/95	2/6/95	2/6/95	5/25/95	6/13/95
ISOLATOR	1356680-1	P	Ma	New	2/6/95	2/6/95	2/16/95	2/21/95	5/25/95	5/25/95
CABLE ASSY, SPACECRAFT IF - W4	1356425-1	M	Haapala	New	2/9/95	2/9/95	3/20/95	3/16/95	6/1/95	6/15/95
CABLE ASSY, TEMP MONITOR - W5	1356426-1	M	Haapala	New	2/9/95	2/9/95	3/20/95	3/16/95	6/1/95	6/15/95
CABLE ASSY, SPACECRAFT PWR - W1	1356428-1	M	Haapala	New	2/9/95	2/9/95	3/20/95	4/10/95	6/1/95	6/15/95
CABLE ASSY, POWER DIST - W2	1356427-1	M	Haapala	New	2/16/95	2/9/95	3/20/95	3/2/95	6/1/95	6/15/95
CABLE ASSY, SCAN DRIVE - W3	1356424-1	M	Haapala	New	2/22/95	2/6/95	3/20/95	3/9/95	6/1/95	6/15/95
NO. 2 RECEIVER ASSY	1356409-1	M	Ely	New	11/28/94	11/28/94	2/6/95	2/9/95	6/1/95	8/2/95
NO. 1 RECEIVER ASSY	1356429-1	M	Ely	New	12/5/94	12/5/94	2/6/95	2/9/95	6/22/95	7/25/95
ANTENNA SUBASSY (MACHINED)	1356404-1	M	Ely	New	2/20/95	2/6/95	4/20/95	4/27/95	6/22/95	
INTERCONNECT CABLE DIAGRAM - AMSU-A1	1356009	DOC	Chapman	New	1/16/95	1/13/95	3/2/95	3/6/95	7/20/95	
NO.1 RECEIVER ASSY WIRE LIST	WL1356429	DOC	Haapala	New	3/20/95	3/13/95	6/29/95		7/20/95	
NO. 2 RECEIVER ASSY WIRE LIST	WL1356409	DOC	Haapala	New	3/23/95	3/13/95	6/29/95		7/20/95	
A1 ANTENNA SUBASSY	1356403-1	M	Ely	New	3/23/95	3/13/95	6/29/95	6/22/95	7/20/95	
A1 SIGNAL PROC ASSY	1356412-1	M	Ely	New	4/10/95	3/13/95	7/1/95	7/3/95	7/20/95	
A1 SIG PROC ASSY WIRE LIST	WL1356412	DOC	Haapala	New	3/27/95	4/6/95	6/29/95	6/22/95	7/20/95	
A1 THERMAL INTERFACE CONTROL	1356011	DOC	Ely	New	5/15/95	4/6/95	6/8/95	4/20/95	7/20/95	7/25/95
EOS/AMSU-A1 ASSY	1356008-1	M	Chapman	New	4/3/95	2/23/95	7/8/95		7/27/95	
A1 BLANKET ASSEMBLY, INSUL (ON HOLD)	1331626-X	M	Ely	ECN	HOLD					

Table III New/Changed EOS Drawings, AMSU-A1 Only (cont'd)

NEW/CHANGED EOS DRAWINGS												
DRAWING TITLE, NUMBER, AND ENDENTURE												
DWG		Part No.		GENERAL INFO		PLANNED/ACTUAL COMPLETION DATE			PLANNED/ACTUAL COMPLETION DATE			
				Mat'l Proc-ure	Resp Engineer	New/ NOAA	Planned Release to Drafting	Actual Release to Drafting	Planned Drawing Complete	Actual Drawing Complete	Planned Release	Actual Release
	Tw	Thi	Fo	Five	Six							
					</							

Table III New/Changed EOS Drawings, AMSU-A1 Only (cont'd)

NEW/CHANGED EOS DRAWINGS													
DRAWING TITLE , NUMBER, AND ENDENTURE													
Dwg No.				Part No.	Mkts/ Proc-use	Resp Engineer	New/ NOAA	PLANNED/ACTUAL COMPLETION DATE					
								Planned Release to Drafting	Actual Release to Drafting	Planned Drawing Complete	Actual Drawing Complete	Planned Release	Actual Release
Two	Three	Four	Five	Six									
				PWB, PLL	P	Thompson	New		X		X	8/10/95	
				INDUCTOR	P	Thompson	New		X		X	8/10/95	
				ENCLOSURE	M	Thompson	New		X		X	5/12/95	5/11/95
				CABLE ASSEMBLY	M	Thompson	New		X		X	7/13/95	
				CABLE ADAPTOR	M	Thompson	New		X		X	5/12/95	5/11/95
				PLL MODULE COVER	M	Thompson	New		X		X	5/12/95	5/11/95

Table IV New/Changed EOS Drawings, AMSU-A2 Only

NEW/CHANGED EOS DRAWINGS		GENERAL INFO		PLANNED/ACTUAL COMPLETION DATE		PLANNED/ACTUAL COMPLETION DATE		
DRAWING TITLE, NUMBER, AND ENDENTURE	Part No.	Mktg/ Proc-ure	Resp Engineer	New/ NOAA	Planned Release to Drafting	Actual Release to Drafting	Planned Release	Actual Release
TwThFolFiveSix								
DRAWINGS USED ON AMSU-A2 ONLY								
SHELF, RF	1331086-1	P	Ely	ECN	2/14/95	2/21/95	4/8/95	4/20/95
DRIVE ASSY, REFLECTOR	1333850-2	M	Chapman	ECN	3/9/95	3/21/95	4/20/95	5/15/95
CALIB. SOURCE, WARMLOAD	1331235-2	M	Chapman	ECN	3/9/95	3/21/95	4/20/95	5/15/95
CABLE ASSY, SPACECRAFT PWR - W1	1358431-1	M	Haapala	New	2/14/95	2/9/95	3/23/95	6/15/95
CABLE ASSY, POWER IN - W8	1358819-1	M	Haapala	New	2/14/95	2/9/95	3/23/95	6/15/95
CABLE ASSY, POWER OUT - W2	1358432-1	M	Haapala	New	2/28/95	3/23/95	3/16/95	6/15/95
CABLE ASSY, SCAN DRIVE - W3	1358435-1	M	Haapala	New	3/2/95	3/23/95	3/9/95	8/2/95
CABLE ASSY, SPACECRAFT I/O - W4	1358434-1	M	Haapala	New	2/14/95	2/9/95	3/23/95	6/15/95
CABLE ASSY, TEMP & ANALOG - W5	1358818-1	M	Haapala	New	2/14/95	2/9/95	4/20/95	6/15/95
CABLE ASSY, PWR DISTRIB - W6	1358817-1	M	Haapala	New	3/7/95	2/9/95	3/23/95	6/15/95
CABLE ASSY, CLOCK & PRT - W7	1358818-1	M	Haapala	New	3/6/95	2/9/95	3/23/95	6/15/95
A2 RECEIVER ASSEMBLY	1358441-1	M	Ely	New	2/20/95	2/19/95	3/2/95	7/25/95
A2 CARD CAGE ASSY	1331330-2	M	Ely	ECN	3/20/95	3/13/95	4/6/95	6/22/95
A2 SIGNAL PROCESSING ASSEMBLY	1358439-1	M	Ely	New	4/24/95	3/6/95	5/4/95	6/29/95
A2 SIG PROC ASSY WIRE LIST	WL1358439	DOC	Haapala	New	4/3/95	4/27/95	6/22/95	7/13/95
A2 WIRING DIAGRAM	1356007	DOC	Chapman	New	2/1/95	1/13/95	3/9/95	7/20/95
A2 RCVR ASSY WIRE LIST	WL1358441	DOC	Haapala	New	3/29/95	3/13/95	6/29/95	7/20/95
A2 THERMAL INTERFACE CONTROL	1356012	DOC	Ely	New	5/22/95	4/20/95	6/15/95	7/25/95
EOS/AMSU-A2 ASSEMBLY (ON HOLD)	1356006-1	M	Chapman	New	4/10/95	3/23/95	7/6/95	
A2 ANTENNA SUBASSY (ON HOLD)	1331210-2	M	Chapman	ECN	3/13/95	3/16/95	4/3/95	HOLD
REFLECTOR ASSY, PRIMARY	1355835-1	P	Brest	New		X		X
BLANKET ASSY, INSULATION (ON HOLD)	1331253-X	M	Ely	ECN	HOLD			

Table V New/Changed EOS Drawings, AMSU-A1 and A2

NEW/CHANGED EOS DRAWINGS		GENERAL INFO		PLANNED/ACTUAL COMPLETION DATE						
DRAWING TITLE , NUMBER, AND ENDENTURE	Part No.	Make/ Proc-ure	Resp Engineer	New/ NOAA	Planned Release to Drafting	Actual Release to Drafting	Planned Drawing Complete	Actual Drawing Complete	Planned Release	Actual Release
TwThFolFveSix DRAWINGS USED ON AMSU-A1 AND A2										
OSCILLATOR, STABLE	1356610-X	P	Ma	New	1/12/95	1/12/95	1/18/95	1/18/95	2/21/95	3/30/95
MIXER/AMPLIFIER	1331562-X	P	Ma	ECN	1/19/95	1/23/95	1/23/95	1/28/95	2/23/95	2/16/95
CCA, MUX/RELAY CONTROL	1356000-1	M	Haapala	New	2/2/95	1/16/95	2/13/95	2/2/95	3/2/95	4/27/95
PWB, MUX/RELAY CONTROL	1356417-1	P	Haapala	New	1/16/95	1/16/95	2/2/95	2/2/95	3/2/95	4/6/95
SCHEMATIC, MUX/RELAY CONTROL	1355999	DOC	Haapala	New	12/5/94	11/22/94	1/12/95	1/12/95	3/2/95	4/6/95
CCA, CPU	1356413-1	M	Haapala	New	4/11/95	3/2/95	4/25/95	3/16/95	5/18/95	4/6/95
PWB, CPU	1356415-1	P	Haapala	New	3/13/95	3/2/95	3/28/95	3/16/95	5/18/95	4/6/95
SCHEMATIC, CPU	1356414	DOC	Haapala	New	2/14/95	2/9/95	3/9/95	3/9/95	5/18/95	4/6/95
DC/DC CONVERTER	1356010-1	P	Haapala	New	2/9/95	2/1/95	2/27/95	2/28/95	3/27/95	4/20/95
COMP ASSY, THERMISTOR	1356406-1	M	Haapala	New	3/6/95	2/16/95	3/16/95	4/6/95	4/6/95	4/27/95
BOARD, THERMISTOR	1356407-1	P	Haapala	New	2/16/95	2/16/95	3/9/95	4/6/95	4/6/95	4/27/95
CCA, ANALOG MUX & AD CONVERTER	1356418-1	M	Haapala	New	3/16/95	2/9/95	3/20/95	3/2/95	4/20/95	4/6/95
SCHEMATIC, ANALOG MUX & AD CONVERTER	1356419	DOC	Haapala	New	2/6/95	2/1/95	2/14/95	2/14/95	4/20/95	4/6/95
PWB, ANALOG MUX & AD CONVERTER	1356420-1	P	Haapala	New	2/16/95	2/9/95	3/2/95	3/2/95	4/20/95	4/6/95
CCA, MIL-STD-1553 INTERFACE	1355998-1	M	Haapala	New	2/2/95	1/12/95	2/16/95	4/27/95	6/8/95	6/7/95
PWB, MIL-STD-1553 INTERFACE	1356416-1	P	Haapala	New	1/16/95	1/12/95	2/2/95	4/20/95	6/8/95	6/7/95
HEAT SINK, MIL-STD-1553 CHIP	1356852-1	M	Ely	New	3/30/95	3/30/95	4/15/95	4/27/95	6/8/95	6/7/95
SCHEMATIC, MIL-STD-1553 INTERFACE	1355997	DOC	Haapala	New	11/17/94	11/16/94	1/9/95	4/20/95	6/8/95	6/7/95
DIPLEXER FEEDHORN ASSY	1356755-1	P	Brest	New	3/23/95	3/30/95	4/10/95	4/20/95	6/15/95	6/21/95
MULTIPLEXER FEEDHORN ASSY, A1-1	1356821-1	P	Brest	New	3/23/95	3/30/95	4/10/95	4/20/95	6/15/95	6/21/95
MULTIPLEXER FEEDHORN ASSY, A1-2	1356822-1	P	Brest	New	3/23/95	3/30/95	4/10/95	4/20/95	6/15/95	6/21/95
POWER CONTROL/MONITOR ASSEMBLY	1356760-X	M	Haapala	New		X	6/22/95	6/22/95	7/13/95	
CCA, PWR CONTROL & MONITOR	1356002-1	M	Haapala	New	3/23/95	3/2/95	4/7/95	3/23/95	6/15/95	6/13/95
PWB, PWR CONTROL & MONITOR	1356422-1	P	Haapala	New	2/16/95	2/9/95	3/9/95	3/23/95	6/15/95	6/13/95
SCHEMATIC, PWR CONTROL & MONITOR	1356001	DOC	Haapala	New	2/2/95	2/2/95	2/16/95	2/21/95	6/15/95	6/13/95
ENCLOSURE, FILTER	1356781-1	M	Haapala	New	3/23/95	3/2/95	6/8/95	6/22/95	8/22/95	8/2/95
COVER	1356820-1	M	Haapala	New		X	6/22/95	6/22/95	7/13/95	8/2/95
LABEL, IDENTIFICATION	1337725-3/4	M	Ely	ECN	6/1/95	6/8/95	6/8/95	6/12/95	6/22/95	6/15/95
TRANSISTOR ASSY	1356784-1	M	Haapala	New	3/6/95	3/6/95	7/7/95	6/22/95	7/20/95	8/2/95
BRACKET, TRANSISTOR	1356789-1	M	Haapala	New		X	6/22/95	6/22/95	7/20/95	8/2/95
TERMINAL BOARD, DIODE SUPPRESSION	1356790-1	M	Haapala	New		X	6/22/95	6/22/95	7/20/95	8/2/95
COVER, ALIGNMENT CUBE	1356421-1	M	Ely	New	6/8/95		6/22/95	6/22/95	7/20/95	8/2/95
CARD ASSY, I/O INTERFACE (ADDED)	1356762-1	M	Haapala	New		X		X		
TERMINAL BOARD ASSY, I/O INTERFACE (ADDED)	1356897-1	M	Haapala	New		X		X		8/2/95

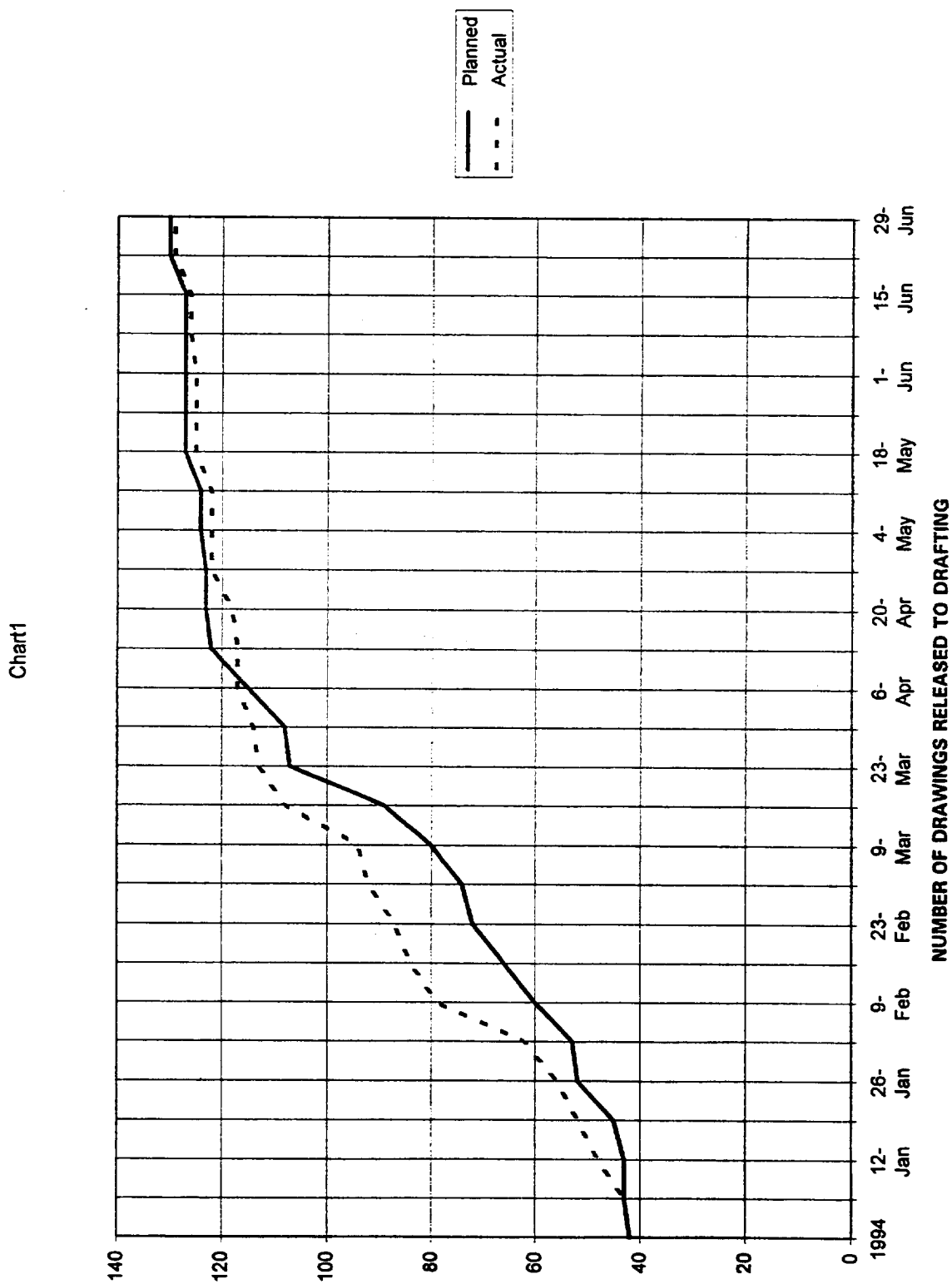


Figure 1 Drawings Released to Drafting

Chart2

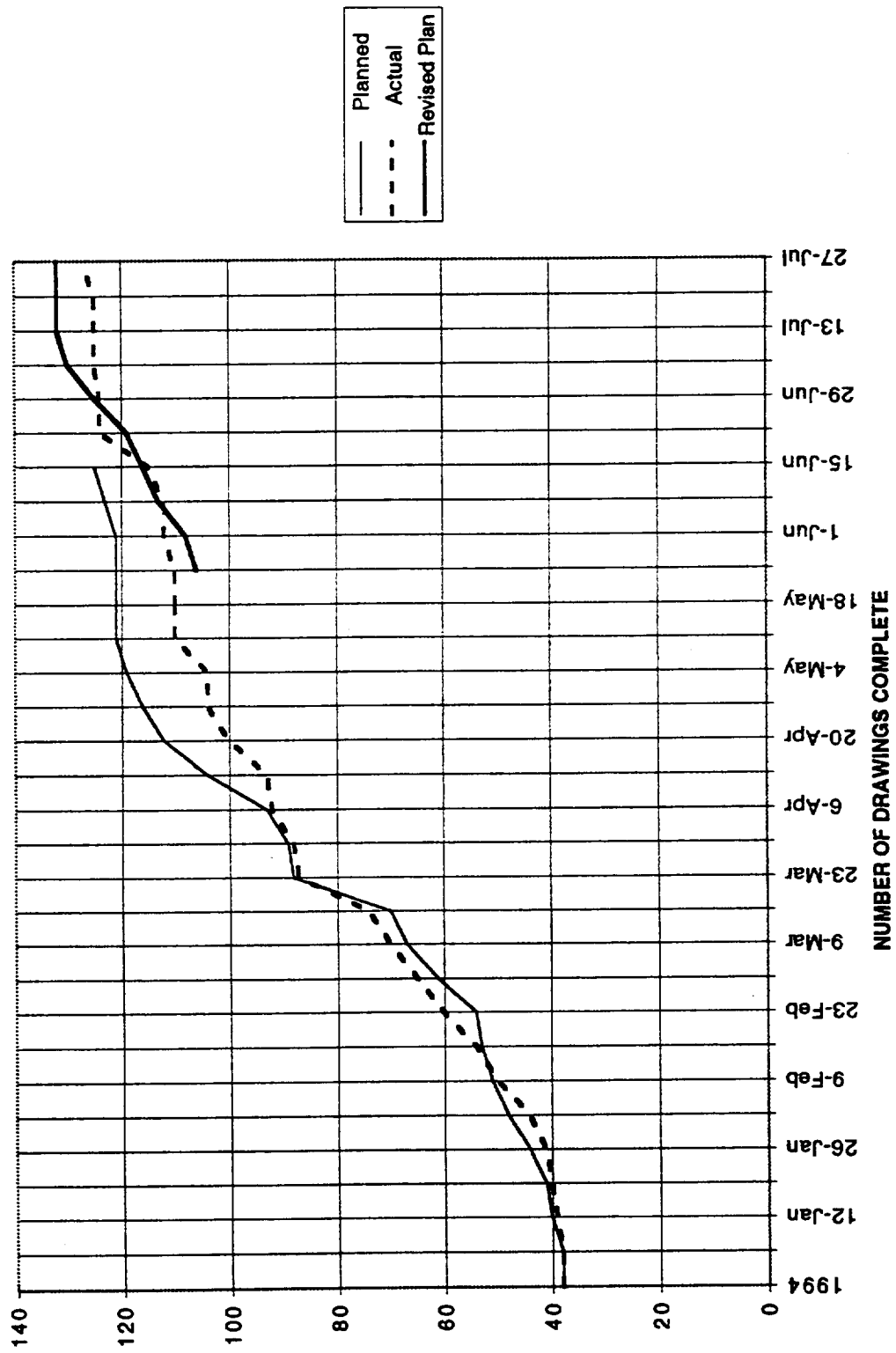


Figure 2 Drawings Complete

Chart3



Figure 3 Drawings Approved And Released

Section 5

WEIGHT AND POWER BUDGETS (CDRL 503)

Weight and power estimates, shown in Tables VI and VII, are unchanged since last month.

Table VI EOS/AMSU-A Weight Budgets and Estimates

Subassembly	AMSU-A1		AMSU-A2	
	Budgeted Weight (kg)	Estimated Weight (kg)	Budgeted Weight (kg)	Estimated Weight (kg)
Antenna	25	22.46	32	29.18
Receiver	16	12.90	4	2.00
Signal Processor	7	6.23	4	3.99
Power Distribution	2	1.59	2	1.59
Miscellaneous	7	4.56	7	3.75
Subtotals	57	47.74	49	40.51
Totals				
Estimated	88.25			
Budgeted	106			
Specification	110			

Table VII EOS/AMSU-A Power Budgets and Estimates

Subassembly	AMSU-A1		AMSU-A2	
	Budgeted Power (W)	Estimated Power (W)	Budgeted Power (W)	Estimated Power (W)
Antenna Scan Drive				
Noisy Bus	4	3.1	4	3.2
Quiet Bus	11	9.7	7	5.1
Receiver	36	34.3	5	4.9
Signal Processor	13	12.1	9	7.8
DC/DC Converter	19	18.2	7	5.8
Subtotals	83	77.4	32	26.8
UIID Allocation	88		37	
AMSU-A Totals				
Estimated	104.2			
Budgeted	115			
UIID Allocation	125			

Section 6

PERFORMANCE ASSURANCE (CDRL 204)

This section consists of a compilation of the weekly reports from Quality and Design Assurance.

6.1 Quality Assurance Following are Quality Assurance's weekly reports:

EOS/AMSU-A WEEKLY REPORT FOR WEEK ENDING 07/20/95

GENCORP
AEROJET

• QUALITY ASSURANCE

- Accomplishments Last Week

- >> Participated on the Drawing Review Meeting.
- >> Supported Procurement as required.
- >> Problem review meeting was held at Millitech to discuss the Quality issues found during the Pre-Award Audit. Some of the issues were corrected and others were in the process of being corrected. It was found that the Supplier is willing to correct and comply with the P. O. requirements.
- >> Problem review meeting was held at Phonon to meet the new QA Manager and to discuss the Program status, i.e. : SDRL's, Schedule etc. They are behind with their submittals. They are lacking information or spec. The request for information and the Specs were taken care on real time via phone conversation with AESC.

EOS/AMSU-A WEEKLY REPORT FOR WEEK ENDING 07/20/95

GENCORP
AEROJET

- Planned Activities for This Week

- >> Participate on the Drawing Review meetings.
- >> Participate in IPT meetings as required.
- >> Support procurement as required.

- Critical Issues

- >> Working with the IPT's to bring Suppliers in-line with Quality Requirements.

AMSU-A WEEKLY REPORT FOR WEEK ENDING 07/27/95

GENCORP
AEROJET

- **QUALITY ASSURANCE**

- Accomplishments Last Week

- >> Participated on the Drawing Review Meeting.
 - >> Supported Procurement as required.
 - >> Participated in a meeting with NASA to develop and establish the Parts, Materials Processes Control Board (PMPCB).
 - >> Participated in Cost Account negotiations with NASA.

AMSU-A WEEKLY REPORT FOR WEEK ENDING 07/27/95

GENCORP
AEROJET

- **QUALITY ASSURANCE (continued)**

- Planned Activities for This Week

- >> Participate on the Drawing Review meetings.
 - >> Participate in IPT meetings as required.
 - >> Support procurement as required.
 - >> Follow up visit to COI, Vernitron and Amplica to review the status of their SDAR's submittal and problem follow-up.

- Critical Issues

- >> Working with the IPT's to bring Suppliers in-line with Quality Requirements.

6.2 *Design Assurance* Following are Design Assurance's weekly reports:

EOS /AMSU-A WEEKLY REPORT FOR WEEK ENDING 7/6/95

GENCORP
AEROJET

• Design Assurance

– Accomplishments Last Week

- » Reviewed Vernitron's Reliability Analysis Report(Approved As Written) and Materials and Processes List(Approved With Comments) for the brushless resolver and the Materials and Processes List(Approved With Comments) for the brushless motor.
 - Vernitron's request to use their own soldering standard instead of NHB 5300.4(3A-2) will be reviewed by V. Felix and/or Y. Elliott, and if acceptable, submitted to NASA for approval.
- » Reviewed NASA fact finding of proposal for Design Assurance Parts Control and provided response to Program Office.
- » Prepared draft of Litton trip report memo identifying high nail PMP issues and related action items for the DRO and VCGDO.
- » Reviewed NASA document, Instructions for EEE Parts Selection, Screening and Qualification." It is being used as a guide in preparing specifications for non-mil/non-standard parts and components.

EOS /AMSU-A WEEKLY REPORT FOR WEEK ENDING 7/6/95 (continued)

GENCORP
AEROJET

• Design Assurance

– Planned Activities For This Week

- » Support meeting at FEI to discuss DC/DC Converter specification and related parts issues.
- » Support FEI PDR for TCXO.
- » Continue support of parts procurement/standardization
 - Determine ELMO's response to RFQ to do additional screening/QCI for HRT-42010 transistor and HRNA-03170B MMIC. Initiate NSPARs if response favorable.
 - Examine latest MRP parts data to ensure that all nonstandard passive devices and magnetics have been identified.
- » Review revised R/D Converter specification(AE-26026E).
- » Review Vernitron QA Plan for brushless motor.
- » Review/proof update of Parts/Device Stress Analysis (CDRL 109).
- » Continue drawing/ECN reviews.

– Critical Issues

- » Specifications/NSPARs for long lead parts.

EOS /AMSU-A WEEKLY REPORT FOR WEEK ENDING 7/13/95

GENCORP
AEROJET

• Design Assurance

– Accomplishments Last Week

- » Prepared NSPAR EOS-016 for three M55310 crystal oscillators and obtained internal approvals.
- » Prepared NSPAR EOS-017 for HRT-42010 transistor and routed for signature.
- » Incorporated lot specific life testing into specification (AE-26672) for amplifier microcircuit HRNA-03170 and obtained internal approvals.
- » Reviewed Vernitron QA Plan (specifically the FRACAS, DPA and PMP sections) and found it acceptable.
- » Attended meeting at FEI to discuss DC/DC Converter specification and related parts issues. Action items were identified and are now being addressed.
- » Reviewed/proofed update of Parts/Device Stress Analysis and forwarded to Word Processing.
- » Reviewed/signed revised R/D Converter specification (AE-26026E).

EOS /AMSU-A WEEKLY REPORT FOR WEEK ENDING 7/13/95 (continued)

GENCORP
AEROJET

• Design Assurance

– Accomplishments (continued)

- » Held telecon discussions with NASA (J. Cardone) regarding proposed new PAR Section 5 for EEE Parts Control and GSFC document 311-INST-001, "Instructions for EEE Parts Selection, Screening, and Qualification".
 - NASA indicated that on many projects they're eliminating the traditional NSPAR process and having the contractors establish a Parts Control Board (PCB) for parts selection/approval using the 311-INST-001 criteria for screening/testing.
 - A meeting to discuss these issues with NASA Parts Group representatives is planned for last week of July at Aerojet.
- » Supported drawing/ECN reviews.

– Planned Activities For This Week

- » Submit NSPAR EOS-016 to NASA.
- » Obtain internal approval of NSPAR EOS-017 and submit to NASA.
- » Review Vernitron SDRL submittals.

EOS /AMSU-A WEEKLY REPORT FOR WEEK ENDING 7/13/95 (continued)

GENCORP
AEROJET

• Design Assurance

– Planned Activities (continued)

- » Investigate questions submitted by Amplica concerning IF Amplifier specification, statement of work, and parts issues: Prepare response.
- » Investigate radiation hardness issue involving Hall Effect devices(used in the brushless motor) and how Vernitron can demonstrate survivability to the specified cosmic-ray fluence level.
- » Work action items involving parts screening/testing from both the FEI PDR for the VCGDO and the FEI meeting on the DC/DC Converter.
- » Review GSFC document 311-INST-001 and proposed new PAR Section 5, and prepare questions/comments.
- » Continue drawing/ECN reviews.

– Critical Issues

- » Specifications/NSPARs for long lead parts

EOS /AMSU-A WEEKLY REPORT FOR WEEK ENDING 7/20/95

GENCORP
AEROJET

• Design Assurance

– Accomplishments Last Week

- » Received NASA approval of NSPARs EOS-012(JANS diodes), EOS-014(CMOS RAM) and EOS-015(dual pulse transformer).
- » NSPAR EOS-011(FIFO microcircuit) was disapproved, with recommendation to add burn-in and lot specific QCI to product specification(AE-26674). Prepared memo to NASA requesting reconsideration since these tests are required as part of the Class S screening and QCI which is already included.
- » Submitted NSPAR EOS-016 for three M55310 crystal oscillators to NASA.
- » Obtained internal approval of NSPAR EOS-017 for HRT-42010 transistor.
- » Reviewed the following Vernitron(brushless motor) SDRLs:
 - Materials and Processes list - Approved as written
 - Reliability Analysis - Approved as written
 - Parts & Devices Identification List - Approved with comments

EOS /AMSU-A WEEKLY REPORT FOR WEEK ENDING 7/20/95 (continued)

GENCORP
AEROJET

• Design Assurance

– Accomplishments (continued)

- Parts & Devices Stress Analysis - Approved as written
- Failure Modes and Effects Analysis - Approved as written
- Worst Case Analysis - Approved as written
- » Submitted update of Parts/Device Stress Analysis (CDRL 109) to NASA.
- » Compiled set of advance questions and faxed to NASA(J. Cardone) in preparation for next weeks meeting at Aerojet to discuss proposed new PAR Section 5 for EEE Parts Control and GSFC document 311-INST-001, "Instructions for EEE Parts Selection, Screening, and Qualification".
- » Supported drawing/ECN reviews.

– Planned Activities For This Week

- » Submit NSPAR EOS-017 to NASA.
- » Prepare NSPAR EOS-018 for the R/D converter and obtain internal approval.
- » Review 11 DPA reports submitted by FEI.

EOS /AMSU-A WEEKLY REPORT FOR WEEK ENDING 7/20/95 (continued)

GENCORP
AEROJET

• Design Assurance

– Planned Activities (continued)

- » Review Litton Q.A. Plan.
- » Meet with NASA Product Assurance and Parts Group representatives to discuss establishment of Parts Control Board(PCB) and proposed new PAR Section 5.
- » Review Vernitron's proposed use of specification SSQ-22687, which was used on Space Station program, to procure Hall Effect devices.
- » Continue drawing/ECN reviews.

– Critical Issues

- » Specifications/NSPARs for long lead parts

AMSU-A WEEKLY REPORT FOR WEEK ENDING 7/27/95

**GENCORP
AEROJET**

• Design Assurance

– Accomplishments Last Week

- » Received NASA approval of NSPAR EOS-013(MV3110-26 varactor diode).
- » Submitted NSPAR EOS-017 for HRT-42010 transistor to NASA.
- » Obtained quote from DPA Labs indicating they can deliver microcircuit HRNA-03170 to our specification(AE-26672).
- » Obtained internal approval of NSPAR EOS-018 for the R/D converter; however, NASA Parts Group indicated QCI in specification(AE-26026) is not acceptable.
 - Screening/QCI testing is unchanged from NOAA/AMSU-A (reference: NSPAR No. 028A).
 - Revision to include additional QCI will impact cost/schedule. Need NASA Project Office decision on this heritage part.

AMSU-A WEEKLY REPORT FOR WEEK ENDING 7/27/95 (continued)

**GENCORP
AEROJET**

• Design Assurance

– Accomplishments (continued)

- » Reviewed Vernitron's proposed use of specification SSQ-22687 to procure Hall-Effect devices.
 - Screening/QCI requirements are acceptable.
 - However, it calls out a different vendor similar P/N(i.e. OMH-1075) than the specification used on NOAA/AMSU-A which calls out OMH-1038. Limits on some electrical characteristics are different. Need Electronics Team to review.
- » Conducted 2 day meeting with NASA Parts Group personnel(R. Chinnapongse & V. Patel) to discuss establishment of a Parts Control Board and proposed new PAR Section 5.
 - Prepared first cut of a Parts Control Plan(PCP) for implementing new PAR Section 5.
 - Need to proof/edit plan and distribute for comment.
 - Need NASA Project Office decision on whether NOAA/AMSU-A NSPARs have blanket approval or if they will be re-reviewed.

AMSU-A WEEKLY REPORT FOR WEEK ENDING 7/27/95 (continued)

**GENCORP
AEROJET**

- **Design Assurance**

- **Accomplishments (continued)**

- Reviewed a number of open nonstandard parts issues and obtained NASA Parts Group input as follows:
 - For 26149-3 microcircuit, lot specific life testing should be added to AE-26149 (NOTE: This is a heritage part approved via NOAA NSPAR No. 082A).
 - For the R/D Converter from Natel, the specification needs revision to include QCI; Groups A,B and D (NOTE: This is a heritage part approved via NOAA NSPAR No. 028D).
 - The JANTXV2N7272 transistor is acceptable if procured from QPL-19500 source.
 - For NSPAR EOS-011 for FIFO microcircuit which had been disapproved, they agreed that burn-in and lot specific QCI were already included in the specification AE-26674. However, they want burn-in circuit added.

- » Supported drawing/ECN reviews.

AMSU-A WEEKLY REPORT FOR WEEK ENDING 7/27/95 (continued)

**GENCORP
AEROJET**

- **Planned Activities For This Week**

- » Complete review of 12 DPA reports submitted by FEI.
 - » Complete review of Litton Q.A. Plan.
 - » Review the following additional SDRLs:
 - Phonon QA Plan
 - FEI Materials and Processes List
 - Vernitron Materials and Processes List
 - Amplica NSPARs
 - » Answer vendor(MDT) questions on varactor diode specification AE-26678.
 - » Revise specification AE-26661 for NE243187 transistor with changes requested by NEC.
 - » Continue drawing/ECN reviews.

AMSU-A WEEKLY REPORT FOR WEEK ENDING 7/27/95 (continued)

**GENCORP
AEROJET**

– Planned Activities (continued)

» Work action items from last weeks meeting with NASA Parts Group:

- Proof/edit draft of PCP and distribute for comment
- Provide list of subcontractors
- Provide list of all test labs
- Provide estimated number of NSPARs
- Schedule first Parts Control Board meeting
- Modify parts list database
- Verify NASA approval of Aerojet's DPA procedure(AS8070)
- Forward parts list for FEI hybrids (when received)

– Critical Issues

» Specifications/NSPARs for long lead parts

Page 1

7/31/95
EOS/AMSU-A
NSPAR TRACKING LOG

NSPAR NO.	SYSTEM/COMPONENT	DESCRIPTION		DATE SUBMITTED	NASA RESPONSE	
		PART NAME	PART NO.		DESCRIPTION	DATE
EOS-001	DIGITAL PROCESSOR	1553 MICROCIRCUIT	26605-1	12/8/94	APPROVED	12/19/94
EOS-002	DIGITAL PROCESSOR	CMOS RAM MICROCIRCUIT	AS8083-37	2/9/95	APPROVED	3/3/95
EOS-003	DIGITAL PROCESSOR	CMOS RAM MICROCIRCUIT	AS8083-36	2/9/95	APPROVED	3/3/95
EOS-004	PLO	OSCILLATOR TRANSISTOR	28861-01	3/15/95	DISAPPROVED	4/5/95
EOS-004A	PLO	OSCILLATOR TRANSISTOR	28861-01	4/11/95	APPROVED	5/15/95
EOS-005	DIGITAL PROCESSOR	ANALOG MUX MICROCIRCUIT	AS8322/180028XA	3/27/95	(WITHDRAWN)	
EOS-006	DIGITAL PROCESSOR	A/D CONVERTER MICROCIRCUIT	AS8321-11	3/27/95	APPROVED	5/23/95
EOS-007	DIGITAL PROCESSOR	VOLTAGE REGULATOR MICROCIRCUIT	AS8322/107028XX	3/30/95	(WITHDRAWN)	
.	.	.	AS8322/115018XX	.	(WITHDRAWN)	
.	.	.	AS8321-07	.	(WITHDRAWN)	
.	.	.	AS8322/115028XX	.	(WITHDRAWN)	
EOS-008	DIGITAL PROCESSOR	TRANSISTOR	AS8302-2N2222AS	5/10/95	APPROVED	7/11/95
.	.	.	AS8302-2N2907AS	.	.	.
.	.	.	AS8302-2N3700S	.	.	.
.	.	.	AS8302-2N3763S	.	.	.
.	.	.	AS8302-2N6193S	.	.	.
EOS-009	DIGITAL PROCESSOR	MICROCIRCUIT	AS8322/10101SGX	5/31/95	APPROVED	6/29/95
.	.	.	AS8322/10104SGX	.	.	.
.	.	.	AS8322/10304SGX	.	.	.
.	.	.	AS8322/10702SGX	.	.	.
.	.	.	AS8322/10703SGX	.	.	.
.	.	.	AS8322/10801SPX	.	.	.
.	.	.	AS8322/11005SCX	.	.	.
.	.	.	AS8322/11201SCX	.	.	.
.	.	.	AS8322/11202SGC	.	.	.
.	PLO	.	AS8322/11404SGX	.	.	.
.	DIGITAL PROCESSOR	.	AS8322/11501SGX	.	.	.
.	.	.	AS8322/11502SGX	.	.	.
.	.	.	AS8322/11703SGX	.	.	.
.	PLO	.	AS8322/13501SGX	.	.	.
.	DIGITAL PROCESSOR	.	AS8322/13503SGX	.	.	.
.	.	.	AS8322/30001SCX	.	.	.
.	.	.	AS8322/30203SCX	.	.	.
.	.	.	AS8322/30302SCX	.	.	.
.	.	.	AS8322/30502SCX	.	.	.
.	.	.	AS8322/30701SEX	.	.	.

7/31/95

**EOS/AMSU-A
NSPAR TRACKING LOG**

NSPAR NO.	SYSTEM/COMPONENT	DESCRIPTION		DATE SUBMITTED	NASA RESPONSE	
		PART NAME	PART NO.		DESCRIPTION	DATE
EOS-009	DIGITAL PROCESSOR	MICROCIRCUIT	AS8322/31004SCX	5/31/95	-	-
-	-	-	AS8322R05051SCX	-	-	-
-	-	-	AS8322R05151SCX	-	-	-
-	-	-	AS8322R05253SCX	-	-	-
-	-	-	AS8322R05451SEX	-	-	-
-	-	-	AS8322R05554SEX	-	-	-
-	-	-	AS8322R17001SCX	-	-	-
-	-	-	AS8322R17101SCX	-	-	-
-	-	-	AS8322R17401SCX	-	-	-
EOS-010	PLO	SAMPLING PHASE DETECTOR HYBRID	26662-01	6/6/95	APPROVED	6/29/95
EOS-011	DIGITAL PROCESSOR	MICROCIRCUIT, FIFO	26674-01	6/7/95	DISAPPROVED	7/19/95
EOS-012	PLO	DIODE	AS8301-1N3611-S	6/7/95	APPROVED	7/19/95
-	DIGITAL PROCESSOR	-	AS8301-1N4148-1S	-	-	-
-	-	-	AS8301-1N5417-S	-	-	-
-	-	-	AS8301-1N5615-S	-	-	-
-	-	-	AS8301-1N5651AS	-	-	-
-	-	-	AS8301-1N6117AS	-	-	-
-	-	-	AS8301-1N6161AS	-	-	-
-	-	-	AS8301-1N6642-S	-	-	-
-	PLO	-	AS8301-1N752AS	-	-	-
-	DIGITAL PROCESSOR	-	AS8301-1N829-1S	-	-	-
-	PLO	-	AS8301-1N914-S	-	-	-
-	-	-	AS8301-1N751A1S	-	-	-
-	-	-	AS8301-1N759A1S	-	-	-
EOS-013	PLO	VARACTOR DIODE	26661-01	6/14/95	APPROVED	7/26/95
EOS-014	DIGITAL PROCESSOR	CMOS RAM MICROCIRCUIT	AS8083-38	6/21/95	APPROVED	7/19/95
EOS-015	DIGITAL PROCESSOR	DUAL PULSE TRANSFORMER	26585-01	6/21/95	APPROVED	7/19/95
EOS-016	DIGITAL PROCESSOR	CRYSTAL OSCILLATOR	AS8313-26A04	7/18/95	-	-
-	-	-	AS8313-26B05	-	-	-
-	-	-	AS8313-26C06	-	-	-
EOS-017	PLO	TRANSISTOR	26673-01	7/24/95	-	-
EOS-018	ANTENNA DRIVE	R/D CONVERTER HYBRID	26026-01	TBD	-	-

Section 7

CONFIGURATION MANAGEMENT STATUS REPORT (CDRL 203)

During this reporting period, Configuration Management prepared and submitted CDRL 509, Approved or Controlled Drawings (21 drawings were released and submitted to NASA.).

No Deviations or Waivers were generated during this reporting period.

Configuration Management issued five Class II Engineering Change Notices as shown in Table VI.

Table VI EOS/METSAT ECN Requests

ECR NO.	ISSUE DATE	ASSY. NO.	REV. LTR	PCCB DATE	DOCUMENT TITLE	CHG CLS
CAMSU-094	7/6/95	1338265	NC	7/25/95	Bearing, Ball	II
CAMSU-095	7/6/95	1338266	NC		Bearing, Ball	II
CAMSU-096	7/6/95	1331352	C		Panel, Front Upper	II
CAMSU-097	7/27/95	1348325	B		Crystal Oscillator	II
CAMSU-098	7/27/95	AE-26149	B		Microcircuits	II

Section 8

DOCUMENT/DATA MANAGEMENT STATUS REPORT

8.1 July submittals. During this reporting period, Data Management submitted eleven Contract Documentation Requirements Listings (CDRL) and one non-CDRL to NASA as shown in Table VII.

Table VII July Document Submittals

CDRL No.	Description	Due to NASA	Submitted to NASA
July 1995:			
109	Parts/Device Stress Analysis	*	*
203	Configuration Management Status Rpt (Included in CDRL 529)	7/14/95	7/13/95
204	Performance Assurance Status Report (Included in CDRL 529)	7/14/95	7/13/95
503	Weight/Power Budgets (Included in CDRL 529)	7/14/95	7/13/95
505	Nonstandard Parts Appvl Req:		
	NSPAR EOS-016	**	7/18/95
	NSPAR EOS-017	**	7/24/95
509	Approved or Controlled Dwgs	**	7/12/95
521	Weekly Status Report	Weekly	7/3, 7/11 7/18 & 7/25/95
523	Performance Measurement Status Report (Included in CDRL 534)	7/25/95	7/24/95
529	Reports of Work (Monthly Status Report)	7/14/95	7/13/95
534	Mo./Qrtly. Financial Mgmt. Rpt. (NASA Fm. 533M/533Q)	7/25/95	***7/25/95
536	Small Business Subcontractor Rpt. (Form 295)	7/31/95	7/27/95
None	Self Evaluation	7/14/95	7/13/95
* No submittal, maintained at Aerojet per NASA CDRL			
** CDRL states "as generated"			
*** Handed to NASA Contracting Officer			

8.2 Scheduled submittals. In accordance with the EOS/METSAT Master CDRL Schedule, the CDRL items listed in Tables VIII and IX will be submitted to NASA during the months of August and September 1995.

Table VIII Planned Document Submittals for August

CDRL No.	Description	Due to NASA
August 1995:		
033	S/W Test Plan (Firmware)	8/31/95
033	S/W Test Plan (GSE)	8/31/95
203	Configuration Management Status Rpt (Included in CDRL 529)	8/15/95
204	Performance Assurance Status Report (Included in CDRL 529)	8/15/95
306-2A	S/W Requirements (Firmware)	8/31/95
306-2B	S/W Requirements (GSE)	8/31/95
306-5A	S/W Detailed Design Doc (GSE)	8/31/95
415	S/W Test Procedures (Firmware)	8/31/95
415	S/W Test Procedures (GSE)	8/31/95
503	Weight/Power Budgets (Included in CDRL 529)	8/15/95
509	Approved or Controlled	*
521	Weekly Status Report	Weekly
523	Performance Measurement Status Report (Included in CDRL 534)	8/21/95
529	Reports of Work (Monthly Status Report)	8/15/95
534	Mo./Qrtly. Financial Mgmt. Rpt. (NASA Fm. 533M/533Q)	8/21/95
* CDRL states "as generated" to NASA		

Table IX Planned Document Submittals for September

CDRL No.	Description	Due to NASA
September 1995:		
203	Configuration Management Status Rpt (Included in CDRL 529)	9/15/95
204	Performance Assurance Status Report (Included in CDRL 529)	9/15/95
503	Weight/Power Budgets (Included in CDRL 529)	9/15/95
521	Weekly Status Report	Weekly
523	Performance Measurement Status Report (Included in CDRL 534)	9/21/95
529	Reports of Work (Monthly Status Report)	9/15/95
534	Mo./Qrtly. Financial Mgmt. Rpt. (NASA Fm. 533M/533Q)	9/21/95

Section 9

CONTRACT STATUS

Contract modification six was issued 9 June 1994, and directed Aerojet to incorporate changes to update applicable documents identified in Section J (A - Statement of Work, C - Performance and Operation Specification, E - Contract Documentation Requirements List, G - General Interface Requirements Document, U - Unique Instrument Interface Document), revise the mission life requirement for the EOS AMSU-A instrument, and delete the requirement for a Bench Check Unit (reference Item A1, Clause B.1). Aerojet submitted price proposal C9180-80-02A on 28 July 1994. Total CPAF proposal value is \$727,967. Hours have been agreed to. An updated price summary report which reflects the agreed to hours has been submitted to NASA.

The combined EOS/METSAT proposal (RFP5-16372/433) was submitted on March 23, 1995. Face-to-face negotiations began in July.

APPENDIX A
EOS/AMSU-A & COMBINED PROGRAM
DESIGN PHASE SCHEDULE

EOS/AMSU-A & COMBINED PROGRAM DESIGN PHASE SCHEDULE

ID	Act Code	1994	1995	1996	1
7		Jul	Aug	Sep	Oct
9	D30				
10	D40				
11	D42				
12					
13					
14					
17	D110				
18	D115				
19	D150				
22	D270				
23					
25	D450				
26	D480				
27	D490				
29	D550				
30	D560				
31	D570				
32	D580				
33					
35	D700				

Task

Progress

Critical

Critical Progress

Milestone

Milestone Complete

Baseline

Baseline Complete

↑

↑

↑

↑

Date: 7/31/95

Page 1

ID	Act Code		94	1996	1
			Jul Aug Sep Oct Nov Dec Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec Jan Feb Mar Apr May Jun		
37	D800	PREP ENG TELEMETRY DESC DOC (CDRL 305) - FINAL			
39	D820	PREP ENG TELEMETRY DESC DOC (CDRL 305) - UPDATE		4/17	5/16
40	D900	UPDATE INTERFACE DESC DOC (CDRL 519) - PRELIMINARY	7/16		
41	D920	UPDATE INTERFACE DESC DOC (CDRL 519) - FINAL		7/31	12/21
42	D925	PREP INTERFACE CONTROL DOC INPUT (CDRL 516) - INITIAL		9/6	
43	D930	PREP INTERFACE CONTROL DOC INPUT (CDRL 516) - 1ST UPDATE		7/31	12/21
44	D940	PREP INTERFACE CONTROL DOC INPUT (CDRL 516) - 2ND UPDATE			7/1
45		SYS ENG SYSTEM PLANS & PROCEDURES (74-2140)			
47	D1000	PREP PERF VERIF PLAN(CDRL 22)& SPEC(CDRL 308)-PDR UPDATE		7/28	
48	D1020	PREP PERF VERIF PLAN (CDRL 022) & SPEC (CDRL 308) - INITIAL		11/23	
50	D1030	PREP PERF VERIF PLAN (CDRL 022) & SPEC (CDRL 308) - FINAL		4/10	9/28
52	D1100	PREP CALIBRATION MANAGEMENT PLAN (CDRL 018) - FINAL		8/15	
53	D1120	PREP DETAILED GROUND CALIB PROCEDURES (CDRL 410)			4/1
54	D1150	PREP PRELIM OPERATION IN-FLIGHT CHECK-OUT PLAN (CDRL 25)		8/4	
55	D1180	PREP FINAL OPERATION IN-FLIGHT CHECK-OUT PLAN (CDRL 25)		4/3	5/25
56	D1200	PREP OPERATION IN-FLIGHT CALIB PROCED (CDRL 404) - PRELIM		7/14	
57	D1250	PREP GEN. OPERATION COMMAND PROCED (CDRL 405) - PRELIM		8/18	
58	D1260	PREP CONTROL OF UNSCHEDULED ACTIVITIES (CDRL 408)	9/2	SUSPENDED	
59	D1270	PRELIM STORAGE PLAN - DRAFT - (CDRL 024)		10/3	12/22
60	D1272	PRELIM STORAGE PLAN - FINAL - (CDRL 024)		7/24	10/26
61	D1274	PRELIM STORAGE TEST PROCEDURE (CDRL 407)		8/13	10/26

Task	Progress	Critical	Baseline	Baseline Complete
Task 1	Progress 1	Critical 1	Baseline 1	Baseline Complete 1
Task 2	Progress 2	Critical 2	Baseline 2	Baseline Complete 2
Task 3	Progress 3	Critical 3	Baseline 3	Baseline Complete 3
Task 4	Progress 4	Critical 4	Baseline 4	Baseline Complete 4
Task 5	Progress 5	Critical 5	Baseline 5	Baseline Complete 5
Task 6	Progress 6	Critical 6	Baseline 6	Baseline Complete 6
Task 7	Progress 7	Critical 7	Baseline 7	Baseline Complete 7
Task 8	Progress 8	Critical 8	Baseline 8	Baseline Complete 8
Task 9	Progress 9	Critical 9	Baseline 9	Baseline Complete 9
Task 10	Progress 10	Critical 10	Baseline 10	Baseline Complete 10
Task 11	Progress 11	Critical 11	Baseline 11	Baseline Complete 11
Task 12	Progress 12	Critical 12	Baseline 12	Baseline Complete 12
Task 13	Progress 13	Critical 13	Baseline 13	Baseline Complete 13
Task 14	Progress 14	Critical 14	Baseline 14	Baseline Complete 14
Task 15	Progress 15	Critical 15	Baseline 15	Baseline Complete 15
Task 16	Progress 16	Critical 16	Baseline 16	Baseline Complete 16
Task 17	Progress 17	Critical 17	Baseline 17	Baseline Complete 17
Task 18	Progress 18	Critical 18	Baseline 18	Baseline Complete 18
Task 19	Progress 19	Critical 19	Baseline 19	Baseline Complete 19
Task 20	Progress 20	Critical 20	Baseline 20	Baseline Complete 20
Task 21	Progress 21	Critical 21	Baseline 21	Baseline Complete 21
Task 22	Progress 22	Critical 22	Baseline 22	Baseline Complete 22
Task 23	Progress 23	Critical 23	Baseline 23	Baseline Complete 23
Task 24	Progress 24	Critical 24	Baseline 24	Baseline Complete 24
Task 25	Progress 25	Critical 25	Baseline 25	Baseline Complete 25
Task 26	Progress 26	Critical 26	Baseline 26	Baseline Complete 26
Task 27	Progress 27	Critical 27	Baseline 27	Baseline Complete 27
Task 28	Progress 28	Critical 28	Baseline 28	Baseline Complete 28
Task 29	Progress 29	Critical 29	Baseline 29	Baseline Complete 29
Task 30	Progress 30	Critical 30	Baseline 30	Baseline Complete 30
Task 31	Progress 31	Critical 31	Baseline 31	Baseline Complete 31
Task 32	Progress 32	Critical 32	Baseline 32	Baseline Complete 32
Task 33	Progress 33	Critical 33	Baseline 33	Baseline Complete 33
Task 34	Progress 34	Critical 34	Baseline 34	Baseline Complete 34
Task 35	Progress 35	Critical 35	Baseline 35	Baseline Complete 35
Task 36	Progress 36	Critical 36	Baseline 36	Baseline Complete 36
Task 37	Progress 37	Critical 37	Baseline 37	Baseline Complete 37
Task 38	Progress 38	Critical 38	Baseline 38	Baseline Complete 38
Task 39	Progress 39	Critical 39	Baseline 39	Baseline Complete 39
Task 40	Progress 40	Critical 40	Baseline 40	Baseline Complete 40
Task 41	Progress 41	Critical 41	Baseline 41	Baseline Complete 41
Task 42	Progress 42	Critical 42	Baseline 42	Baseline Complete 42
Task 43	Progress 43	Critical 43	Baseline 43	Baseline Complete 43
Task 44	Progress 44	Critical 44	Baseline 44	Baseline Complete 44
Task 45	Progress 45	Critical 45	Baseline 45	Baseline Complete 45
Task 46	Progress 46	Critical 46	Baseline 46	Baseline Complete 46
Task 47	Progress 47	Critical 47	Baseline 47	Baseline Complete 47
Task 48	Progress 48	Critical 48	Baseline 48	Baseline Complete 48
Task 49	Progress 49	Critical 49	Baseline 49	Baseline Complete 49
Task 50	Progress 50	Critical 50	Baseline 50	Baseline Complete 50
Task 51	Progress 51	Critical 51	Baseline 51	Baseline Complete 51
Task 52	Progress 52	Critical 52	Baseline 52	Baseline Complete 52
Task 53	Progress 53	Critical 53	Baseline 53	Baseline Complete 53
Task 54	Progress 54	Critical 54	Baseline 54	Baseline Complete 54
Task 55	Progress 55	Critical 55	Baseline 55	Baseline Complete 55
Task 56	Progress 56	Critical 56	Baseline 56	Baseline Complete 56
Task 57	Progress 57	Critical 57	Baseline 57	Baseline Complete 57
Task 58	Progress 58	Critical 58	Baseline 58	Baseline Complete 58
Task 59	Progress 59	Critical 59	Baseline 59	Baseline Complete 59
Task 60	Progress 60	Critical 60	Baseline 60	Baseline Complete 60
Task 61	Progress 61	Critical 61	Baseline 61	Baseline Complete 61
Task 62	Progress 62	Critical 62	Baseline 62	Baseline Complete 62
Task 63	Progress 63	Critical 63	Baseline 63	Baseline Complete 63
Task 64	Progress 64	Critical 64	Baseline 64	Baseline Complete 64
Task 65	Progress 65	Critical 65	Baseline 65	Baseline Complete 65
Task 66	Progress 66	Critical 66	Baseline 66	Baseline Complete 66
Task 67	Progress 67	Critical 67	Baseline 67	Baseline Complete 67
Task 68	Progress 68	Critical 68	Baseline 68	Baseline Complete 68
Task 69	Progress 69	Critical 69	Baseline 69	Baseline Complete 69
Task 70	Progress 70	Critical 70	Baseline 70	Baseline Complete 70
Task 71	Progress 71			

EOS/AMSU-A & COMBINED PROGRAM DESIGN PHASE SCHEDULE

ID	Act Code	1994	1995	1996	1997
62	PREP TRANSPORT & HANDLING PROCEDURES (CDRL 406)(DRAFT)	D1280	10/31	6/26	1
63	PREP TRANSPORT & HANDLING PROCEDURES (CDRL 406)(FINAL)			8/14	9/28
64	PREP ASSEMBLY PROCEDURES (CDRL 413)	D1290		↑	3/18
65	PREP DETAILED TEST PROCEDURES (CDRL 409)	D1295		↑	6/3
66	SYSTEMS ENGR MEETING SUPPORT (74-2160)				
68	PREP FOR & SUPPORT PDR	D1350	8/16	9/22	
69	PREP FOR & SUPPORT CPR 1	D1360	↑	11/1	ON HOLD
70	PREP FOR & SUPPORT CDR	D1380	↑	11/1	TBD
71	REVIEW & SUPPORT SUPPLIERS & PROCUREMENT			8/7	
72	SPARES DEFINITION (74-1410)				
74	PREP SPARES PROGRAM PLAN (CDRL 035) - FINAL	D1450	12/15	9/20	
76	RADIATION ANALYSIS (13-2121)				
78	PRELIM PARTS ASSESSMENT & DCR SUPPORT	D1600	7/28		
79	PREP FOR & SUPPORT PDR	D1610	8/22	9/22	
80	NOVICE ANALYSIS	D1612	9/26	12/16	
81	NOVICE ANALYSIS UPDATE	D1614		4/17	8/24
82	PARTS ASSESSMENT UPDATES & DESIGN RECOMMENDATIONS	D1615	9/26	3/30	
83	PREP FOR & SUPPORT CDR	D1620	↑	↑	11/1
84	SUPPLIERS COMPONENT REVIEW	D1650	↑	↑	TBD
86	EMI/EMC DESIGN ANALYSIS SUPPORT (65-2122)			7/31	1/25
88	PRELIM EMI/EMC TEST PLAN/PROCEDURE	D1800	8/11		

Task	Critical Progress	Baseline	Baseline Complete
Progress			
Critical			

Date: 7/31/95

EOS/AMSU-A & COMBINED PROGRAM DESIGN PHASE SCHEDULE

ID	Act Code	1994	1995	1
115	D3300	Jul Aug Sep Oct Nov Dec	Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec	Jan Feb Mar Apr May Jun
116	D3350	8/18		
119	D3500	7/14		
120	D3550	8/18	9/8	
121	D3600	8/18	9/22	
122	D3700			1/28
137	D3750			4/11
138	D3760	6/30		11/1
139	D3770	8/18		TBD
140	D3780	6/18	11/3	
141	D3790	8/18	11/10	
142	D3800	10/31	12/23	
143	D3802	11/28	1/26	
144	D3804		3/30	
145	D3806		3/20	4/4
146	D3808		4/5	4/24
147	D3810		2/27	3/9
148	D3820		4/25	4/25
150	D3830		5/1	
151	D3840		12/22	
152	D3850	10/5	11/23	

Date: 7/31/95

Task

Progress

Critical

Critical Progress

Milestone

Milestone Complete

Baseline

Baseline Complete

Page 5

EOS/AMSU-A & COMBINED PROGRAM DESIGN PHASE SCHEDULE

ID	Act Code	94	1996	1
153	GROUP 2A COMPONENTS - RECEIVER DESIGN AUDITS	D3855	2/6 3/2	
154	GROUP 2A COMPONENTS - UPDATE SPECS & SOWS	D3860	10/10 8/20	
155	GROUP 2A COMPONENTS - RELEASE RFPS	D3870	2/8 3/27	
156	GROUP 2A COMPONENTS - REVIEW PROPOSALS & SOURCE SE	D3880	3/7 6/1	
157	GROUP 2A COMPONENTS - SUBMIT P.O. PACKAGE TO NASA	D3884	4/3 8/21	
158	GROUP 2A COMPONENTS - NASA APPROVAL OF P0 PACKAGE	D3888	4/24 8/16	
159	GROUP 2A COMPONENTS - PRE-AWARD AUDITS & FACT FINDIN	D3890	3/17 6/14	
160	GROUP 2A COMPONENTS - AWARD CONTRACTS	D3892	4/26 8/17	
161	GROUP 2A COMPONENTS - PROCUREMENT SUPPORT	D3894	7/28	
162	MED LEAD COMPS(GRP 2B IF FIL,WG ISOL,WG ATT,IF ATT)- SPE	D3896	12/22	
163	GROUP 2B COMPONENTS - SUPPLIER CONFERENCES	D3898	11/21 11/23	
164	GROUP 2B COMPONENTS - RECEIVER DESIGN AUDITS	D3900	2/6 3/2	
165	GROUP 2B COMPONENTS - UPDATE SPECS & SOWS	D3902	1/30 6/16	
166	GROUP 2B COMPONENTS - RELEASE RFPS	D3904	2/20 4/18	
167	GROUP 2B COMPONENTS - REVIEW PROPOSALS	D3906	3/28 9/7	
168	GROUP 2B COMPONENTS - SUBMIT P.O. PACKAGE TO NASA	D3908	6/19 9/28	
169	GROUP 2B COMPONENTS - NASA APPROVAL OF P.O. PACKAGE	D3910	7/19 10/11	
170	GROUP 2B COMPONENTS - PRE-AWARD AUDITS & FACT FINDIN	D3912	4/11 9/27	
171	GROUP 2B COMPONENTS - AWARD CONTRACTS	D3914	7/20 10/12	
172	GROUP 2B COMPONENTS - PROCUREMENT SUPPORT	D3916	9/6	
173	PLO MM&T PROGRAM			

Date: 7/31/95

Task

Progress

Critical

Critical Progress

Milestone

Milestone Complete

Baseline

Baseline Complete

[illegible]

	Task		Critical Progress	Baseline	
Date: 7/31/95	Progress		Milestone 		
	Critical		Milestone Complete 		
					

Page 7

EOS/AMSU-A & COMBINED PROGRAM DESIGN PHASE SCHEDULE

ID	Act Code	1994	1995	1996
		Jul Aug Sep Oct Nov Dec Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec Jan Feb Mar Apr May Jun Jul		1
263	PARTS STRESS ANALYSIS (CDRL 109) - ANALOG PROC	D4550	7/6	
264	REDESIGN ANALOG-MUX/AD CONV CCA FOR OBSOLENCE	D4560	7/14	
265	MUX/RELAY CCA MODS	D4570	9/28	10/13
266	CCA TEST INSTRUCTIONS - ANALOG PROC	D4600	12/6	1/12
268	SCHEMATICS - ANALOG PROC	D4650	1/28	1/12
269	CCA LAYOUT & ARTWORK - ANALOG PROC	D4700	1/18	2/16
270	DOCUMENTATION CHECK - ANALOG PROC	D4750	3/20	3/30
272	PROCURE PARTS FOR CCA PROTOTYPING - ANALOG PROC	D4800	1/17	6/4
274	ASSEMBLE CCA PROTOTYPES - ANALOG PROC	D4820	5/8	5/31
275	TEST CCA PROTOTYPES - ANALOG PROC	D4840	6/1	8/14
277	MUX/ADC CCA DRAFTING & CHECK		1/16	3/9
279	MUX/ADC CCA PROTOTYPE (PARTS, FAB & TEST)		5/1	6/29
281	THERMISTOR ASSY DRAFTING & CHECK		2/20	6/4
283	DETECTOR SPEC REVISIONS	D4855	10/5	10/27
284	POWER SUBSYSTEM - DC CONVERTER (67-2241)			
288	2 EA SELECTED VENDORS REPROPOSALS	D4930	7/28	
289	REVISE DC/DC CONVERTER SPEC	D5000	9/21	10/6
291	DC/DC CONVERTER DESIGN AUDIT	D5008	11/14	1/12
292	RELEASE FINAL DC/DC CONV SPECS AE 24693, 24958	D5010	3/9	3/9
294	SUPPLIER QUOTE UPDATE - DC/DC CONVERTER	D5014	3/13	4/27
296	DC/DC CONVERTER FINAL SUPPLIER SELECTION	D5018	5/1	6/8

Date: 7/31/95

Task

Progress

Critical

Critical Progress

Milestone

Milestone Complete

Baseline

Baseline Complete

[illegible]

Date: 7/31/95	Task		Critical Progress		Baseline	
	Progress		Milestone		Baseline Complete	
	Critical		Milestone Complete			

Page 11

EOS/AMSU-A & COMBINED PROGRAM DESIGN PHASE SCHEDULE

ID	Act Code	1994												1995												1
		Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul
323	A1 BACKPLANE WIRE LIST - FINAL ENG DESIGN																									
324	INCORPORATE DESIGN AUDIT HARNESSES CHANGES																									
325	RF SHELF WIRING DESIGN																									
326	HARNES DRAFTING - A1																									
327	HARNES CHECK - A1																									
328	HARNES DRAFTING - A2																									
329	HARNES CHECK - A2																									
332	A1 BACKPLANE WIRE LIST - DRAFTING																									
333	A1 BACKPLANE WIRE LIST - CHECK																									
334	A2 BACKPLANE WIRE LIST - DRAFTING																									
335	A2 BACKPLANE WIRE LIST - CHECK																									
336	DIODE/TRANSISTOR ASSY DRAFTING & CHECK																									
337	RESISTOR ASSY DRAFTING & CHECK																									
338	INTEG EL DESIGN - TEST PLANS, PROCDs, FIXTS(67-2252)																									
340	1553 I/F TEST CONTROLLER DEV FOR BREADBOARD TEST																									
341	SIGNAL PROC TEST SET ASSEMBLY																									
342	TEST PLANS																									
343	DEVELOP SIG PROC TEST PROCEDURE DRAFT																									
344	ANTENNA DRIVE TEST PROCEDURE DRAFT																									
345	DETECTOR/ PREAMP TEST PROCEDURE DRAFT																									
346	EXTENDER & I/O CARD DESIGN																									

Date: 7/31/95

Task

Progress

Critical

Critical Progress

Milestone

Milestone Complete

Baseline

Baseline Complete

Page 12

[illegible]

Date: 7/31/95	Task		Critical Progress		Baseline		
	Progress		Milestone		Baseline Complete		
	Critical		Milestone Complete				

Page 13

[illegible]

	Task	Critical Progress	Baseline	
Date: 7/31/95	Progress			
	Critical			

EOS/AMSU-A & COMBINED PROGRAM DESIGN PHASE SCHEDULE

ID	Act Code	1995												1											
		Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun		Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May
427	INTERNAL PACKAGING REVIEW - M/T IPT																								
428	ANSWER PACKAGE REVIEW ACTION ITEMS - M/T IPT																								
429	ID PROCEDURES TO BE CHANGED - M/T IPT																								
430	SPEC UPDATE SIGNOFF - M/T IPT																								
431	DRAWING SIGNOFF - M/T IPT																								
432	MECHANICAL COST REDUCTIONS (61-2320)																								
434	COAX CLIP REDESIGN																								
435	COMB PROG - METSAT MECH DESIGN (4510-02-4310)																								
436	UPDATE A2 NASTRAN MODEL																								
437	UPDATE A2 NASTRAN MODEL WITH NEW A2 BASEPLATE																								
438	COMPLETE DRAFTING OF ANTENNA SUBASSY (MACH) DRAWING																								
439	RELEASE A2 ANTENNA TOP ASSY DRAWING																								
440	COMB PROG - MECH COMMON FAB (4510-03-1200)																								
441	1331356-1 A1 BASEPLATE, UPPER																								
442	TABLE TOP CDR/MRR																								
443	DRAWING RELEASE (INCRP ECNs)																								
444	SHOP ORDER PREP																								
445	PROCURE MATERIAL																								
446	FAB 5 PIECES																								
447	COMB PROG - METSAT MECH FAB (4510-03-1400)																								
448	1331652-1 A1 SIDEMOUNT ASSEMBLY																								

Date: 7/31/95

Task

Progress

Critical

Critical Progress

Milestone

Milestone Complete

Baseline

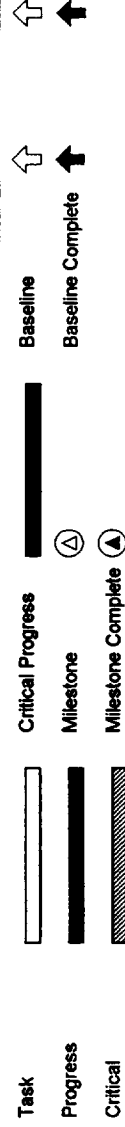
Baseline Complete

↑

↑

EOS/AMSU-A & COMBINED PROGRAM DESIGN PHASE SCHEDULE

ID	Act Code	94	1995												1											
			Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun												
449	TABLE TOP CDR/ MRR												6/26	6/26												
450	DRAWING RELEASE (INCRP ECNs)																									
451	SHOP ORDER PREP																									
452	PROCURE MATERIAL																									
453	ROUGH MACHINE FIRST SIDEMOUNT																									
454	FINISH MACHINE, O.P., & INSPECT 1ST SIDEMOUNT																									
455	ROUGH MACHINE LAST 3 SIDEMOUNTS																									
456	FINISH MACHINE 2ND SIDEMOUNT																									
457	FINISH MACHINE 3RD SIDEMOUNT																									
458	FINISH MACHINE 4TH SIDEMOUNT																									
460	1331404-1 A1 BASEPLATE, LOWER																									
461	TABLE TOP CDR/ MRR																									
462	SHOP ORDER PREP																									
463	PROCURE MATERIAL																									
464	MACHINE 1ST LOWER BASEPLATE																									
465	MACHINE 2ND LOWER BASEPLATE																									
466	MACHINE 3RD LOWER BASEPLATE																									
467	MACHINE 4TH LOWER BASEPLATE																									
468	ACCEPT & BUYOFF ALL LOWER BASEPLATES																									
469	A1 THERMAL ANALYSIS (62-2401)																									
477	PREPARE REDUCED A1 SINDA MODEL	D8550																								



Date: 7/31/95

EOS/AMSU-A & COMBINED PROGRAM DESIGN PHASE SCHEDULE

ID	Act Code	94												1995												1
		Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	
478	PREP & PUBLISH PRELIM A1 THERMAL MATH MODEL(CDRL 103)	D8600																								
480	PRELIMINARY A1 CIRCUIT CARD ANALYSIS	D8650																								
481	PREP FOR & SUPPORT PDR	D8700																								
483	FINAL A1 CIRCUIT CARD ANALYSIS	D8750																								
486	A1 TRASYS MODEL ADJUSTMENTS	D8800																								
487	DETAILED A1 SINDA MODEL ADJUSTMENTS	D8850																								
488	REDUCED A1 SINDA MODEL ADJUSTMENTS	D8900																								
489	CDR A1 PLANNING WITH NASA	D8950																								
491	PREP & PUBLISH UPDATED A1 THERMAL MATH MODEL (CDRL 103)	D9000																								
493	PREPARE A1 THERMAL INTERFACE CONTROL DRAWING	D9050																								
495	A1 PREP FOR & SUPPORT TABLETOP CDR																									
496	A1 PREP FOR & SUPPORT CDR	D9100																								
499	A2 THERMAL ANALYSIS (62-2402)																									
506	PREPARE REDUCED A2 SINDA MODEL	D9400																								
507	PREP & PUBLISH PRELIM A2 THERMAL MATH MODEL (CDRL 103)	D9450																								
508	PRELIMINARY A2 CIRCUIT CARD ANALYSIS	D9500																								
509	A2 PREP FOR & SUPPORT PDR	D9550																								
510	FINAL A2 CIRCUIT CARD ANALYSIS	D9600																								
511	A2 TRASYS MODEL ADJUSTMENTS	D9650																								
512	DETAILED A2 SINDA MODEL ADJUSTMENTS	D9700																								
513	REDUCED A2 SINDA MODEL ADJUSTMENTS	D9750																								

Date: 7/31/95

Task

Progress

Critical

Critical Progress

Milestone

Milestone Complete

Baseline

Baseline Complete

EOS/AMSU-A & COMBINED PROGRAM DESIGN PHASE SCHEDULE

ID	Act Code	1994												1995												1
		Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	
614	CDR A2 PLANNING WITH NASA																									
616	PREP & PUBLISH UPDATED A2 THERMAL MATH MODEL (CDRL 103)																									
616	PREPARE A2 THERMAL INTERFACE CONTROL DRAWING																									
617	A2 PREP FOR & SUPPORT CDR																									
626	ANTENNA SUBSYSTEM DESIGN (89-2510)																									
631	TRADE STUDY PHASE 2 - EVAL MULTIPLE BE REFLECT SUPPLIERS																									
632	TRADE STUDY PHASE 2 - EVAL COMPOSITE REFLECT SUPPLIERS																									
633	TRADE STUDY 2 - TRADE SUPPL/MATERIAL VS COST,SCHED,RISK																									
634	TRADE STUDY PHASE 2 - CONDUCT CUSTOMER TRADE REVIEW																									
636	PRELIM REVIEW OF COMPONENT SPECS																									
636	CONFIRM COMPONENT PERFORMANCE																									
637	CONFIRM SUBSYSTEM PERFORMANCE																									
638	REVIEW ANTENNA DRAWINGS- PRELIMINARY																									
640	CALIBRATION ACCURACY STUDY - COLD CAL																									
642	CALIBRATION ACCURACY STUDY - UPDATE FOR PEER REVIEW																									
644	TEST PROCEDURE UPDATE- DRIVE MOTOR (CDRL 409)																									
646	UPDATE TEST PROCEDURES- ANTENNA SUBSYSTEM (CDRL 409)																									
646	REVIEW ANTENNA DRAWINGS - FINAL																									
648	COMPLETE TEST FIXTURE DESIGN																									
649	COMPLETE TEST FIXTURE FAB																									
652	PREP FOR & SUPPORT INTERNAL DESIGN REVIEW #1																									

Date: 7/31/95

Task

Progress

Critical

Critical Progress

Milestone

Milestone Complete

Baseline

Baseline Complete

EOS/AMSU-A & COMBINED PROGRAM DESIGN PHASE SCHEDULE

		94	1996												1										
ID	Act Code	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
553	PREP FOR & SUPPORT PDR																								
554	PREP FOR & SUPPORT CAL PEER REVIEW #1																								
555	PREP FOR & SUPPORT INTERNAL DESIGN REVIEW #2																								
556	PREP FOR & SUPPORT CDR																								
558	ANTENNA SYS PROCUREMENT SUPPORT (89-2510)																								
559	SPEC UPDATE & REVIEW - BEARINGS																								
560	BEARINGS - SUPPLIER CONFERENCE																								
564	BEARINGS - PRE-AWARD AUDIT AT VENDOR																								
566	BEARINGS - ATP																								
567	BEARINGS- PROCUREMENT SUPPORT (PP)																								
568	SPEC UPDATE & REVIEW - MOTOR/RESOLVER																								
569	MOTORS/RESOLVERS - SUPPLIER CONFERENCE																								
571	MOTORS/RESOLVERS - PRE-AWARD AUDIT AT VENDOR																								
573	MOTORS/RESOLVERS - ATP																								
574	MOTORS/RESOLVERS - PROCUREMENT SUPPORT (PP)																								
575	SPEC UPDATE & REVIEW - MUX/FEEDHORN																								
576	MULTI/DI/FEEDHORN - SUPPLIER CONFERENCE																								
578	MULTI/DI/FEEDHORN - PRE-AWARD AUDIT AT VENDOR																								
580	MULTI/DI/FEEDHORN - ATP																								
581	MULTI/DI/FEEDHORN - PROCUREMENT SUPPORT (PP)																								
582	REFLECTOR - RELEASE REVISED SPEC/DRAWING																								

Task

Progress

Critical

Critical Progress

Milestone

Milestone Complete

Baseline

Baseline Complete

Date: 7/31/95

EOS/AMSU-A & COMBINED PROGRAM DESIGN PHASE SCHEDULE

ID	Act Code	1994	1995	1
583	REFLECTOR - QUOTES RECEIVED	D11020	8/16 9/8	1
584	REFLECTOR - SOURCE SELECTION	D11040	10/3 11/7	
585	REFLECTOR - DESIGN AUDIT	D11060	11/26 1/10	
586	REFLECTOR - RELEASE REVISED SPEC	D11080	12/19 2/2	
587	REFLECTOR - QUOTE UPDATE & EVALUATION	D11100	1/23 1/26	
588	PROCUREMENT PACKAGE SUBMITTAL TO NASA	D11120	2/6 2/9	
589	PROCUREMENT PACKAGE NASA APPROVAL	D11140	2/16 2/15	
590	REFLECTOR - PRE-AWARD AUDIT AT VENDOR	D11160	1/25 1/25	
591	REFLECTOR - ATP		2/16 2/16	
592	REFLECTOR - SUPPORT & REVIEW PDR		3/13 4/6	
593	REFLECTOR - SUPPORT & REVIEW CDR		5/16 6/22	
594	REFLECTOR - ACCEPTANCE DATA REVIEW		9/25 9/28	
596	REFLECTOR PROCUREMENT SUPPORT (BI-MONTHLY REVIEWS)		2/20 2/16	
597	COMBINED PROG - ANTENNA DESIGN (4510-02-6310)			
598	FEEDHORN REDESIGN		6/26 7/27	
599	TEST FEEDHORN/REFLECTOR ASSEMBLY		7/31 8/24	
600	DOCUMENT FEEDHORN DESIGN CHANGES		8/28 9/28	
601	A1 REFLECT CHANGES - DEVELOP SURFACE MEASURE TECHNIQU		8/7 8/24	
602	A1 REFLECTOR CHANGES - TEST PROTOTYPE		9/7 10/12	
603	A1 REFLECTOR CHANGES - DOCUMENT DESIGN CHANGES		10/2 10/19	
604	A2 REFLECTOR EARLY TEST - INSTALL A2 RELECT IN ENG MODEL		10/2 10/12	

Task

Progress

Critical

Critical Progress

Milestone

Milestone Complete

Baseline

Baseline Complete

Date: 7/31/95

Page 21

[illegible]

Date: 7/31/95	Task		Critical Progress		Baseline	
	Progress		Milestone		Baseline Complete	
	Critical		Milestone Complete			

Page 22

EOS/AMSU-A & COMBINED PROGRAM DESIGN PHASE SCHEDULE

ID	Act Code	1995												1											
		Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
631	FAB 5 PIECES													7/31	7/31	TBD									
633	1333999-1 A2 HOUSING SUBASSEMBLY																								
634	TABLE TOP CDR/MRR													7/26	7/26										
635	SHOP ORDER PREP													7/27	7/27										
636	PROCURE MATERIAL													7/27	7/27										
637	FAB 5 PIECES													7/31	7/31										
638	1333653-1 A2 HOUSING, REFLECTOR DRIVE																								
639	TABLE TOP CDR/MRR													7/26	7/26										
640	SHOP ORDER PREP													7/27	7/27										
641	PROCURE MATERIAL													7/27	7/27										
642	FAB 5 PIECES													7/31	7/31										
643	1333390-1 A2 SHAFT, COMPENSATOR																								
644	TABLE TOP CDR/MRR													7/26	7/26										
645	SHOP ORDER PREP													7/27	7/27										
646	PROCURE MATERIAL													7/27	7/27										
647	FAB 4 PIECES													7/31	7/31										
648	SOFTWARE PLNG DOCUMENTS & REQTS (52-1010)																								
651	FINAL SOFTWARE MANAGEMENT PLAN (CDRL 08)													8/1	8/25										
655	SOFTWARE PROCESS MANUAL - UPDATE													9/21	9/21										
658	FINAL ACQUISITION ACTIVITIES PLAN (CDRL 508)													8/16	8/18										
660	FINAL SOFTWARE ASSURANCE PLAN (CDRL 309)													8/18	8/18										

Date: 7/31/95

Task

Progress

Critical

Critical Progress

Milestone

Milestone Complete

Baseline

Baseline Complete

↑

↑

Page 23

ID	Act Code	1996												1											
		Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun		Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May
661	D13810	12/20 12/20																							
662	FIRMWARE DOCUMENTATION (52-2601)																								
667	D12905	8/6 9/1																							
668	D12910	7/10 8/17																							
669	D13000	7/14																							
670	D13050	7/14																							
671	D13150	9/1																							
672	UPDATE FIRMWARE TEST PROCEDURES (CDRL 415)																								
673	D13170	1/3 2/23																							
674	D13175	9/20																							
675	D13180	10/31 11/23																							
676	D13190	1/3 4/27																							
677	D13200	9/12 9/22																							
679	COMMAND & DATA HANDLING FIRMWARE (52-2602)																								
680	D13250	7/14																							
681	D13300	8/31 8/31																							
682	D13350	8/26																							
683	D13400	1/19 1/19																							
685	D13450	8/16 11/10																							
687	D13460	10/16 1/18																							
688	MODIFIED AMSU-A FIRMWARE (52-2603)																								

Task	Critical Progress		Baseline	↑
	Progress	Critical		
Date: 7/31/95				
				
				

EOS/AMSU-A & COMBINED PROGRAM DESIGN PHASE SCHEDULE

ID	Act Code	1994	1995	1996	1
804	STE - PREP FOR & SUPPORT PDR	Jul Aug Sep Oct Nov Dec Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec Jan Feb Mar Apr May Jun	8/22		
806	STE DETAILED DESIGN		10/10	3/9	
808	STE FINAL INTERNAL DESIGN REVIEW			8/10	
810	STE - PREP FOR & SUPPORT CDR			11/1	TBD
812	STE MATERIAL PROCUREMENT			11/27	4/30
814	STE FABRICATION				5/1
816	STE CABLE FABRICATION				5/1
816	STE ASSEMBLY & WIRING				5/1
817	STE INSPECTION				5/1
818	STE CHECK-OUT & SYSTEM TEST				5/30
819	STE TEST PROCEDURE REVISION				1/25
820	SPACECRAFT WORKSTATION (74-1012)				
822	S/C WS INTERNAL DESIGN REVIEW		8/30		
823	S/C WS - PREP FOR & SUPPORT PDR		8/22		
824	S/C WORKSTATION DETAILED DESIGN			1/3	3/9
826	S/C WS FINAL INTERNAL DESIGN REVIEW				
826	S/C WS - PREP FOR & SUPPORT CDR			8/10	
827	S/C WORKSTATION MATERIAL PROCUREMENT			11/1	TBD
828	S/C WS TEST PROCEDURES			11/27	6/23
830	INSTRUMENT HANDLING FIXTURES (74-1031)				6/28
831	HANDLING FIXTURES PRELIMINARY DESIGN		8/18		

Date: 7/31/95

Task

Progress

Critical

Critical Progress

Milestone

Milestone Complete

Baseline

Baseline Complete

EOS/AMSU-A & COMBINED PROGRAM DESIGN PHASE SCHEDULE

ID	Act Code	1996												1												
		Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	
832	HANDLING FIXT INTERNAL DESIGN REVIEW																									
833	HANDLING FIXT - PREP FOR & SUPPORT PDR																									
834	HANDLING FIXTURES DETAILED DESIGN																									
835	HANDLING FIXT FINAL INTERNAL DESIGN REVIEW																									
836	HANDLING FIXT - PREP FOR & SUPPORT CDR																									
837	HANDLING FIXT MATERIAL PROCUREMENT																									
838	HANDLING FIXT FABRICATION																									
839	HANDLING FIXTURES ASSEMBLY																									
842	HANDLING FIXT PROOF TEST PROCEDURE REVISION																									
843	A1 CALIBRATION FIXTURE MODIFICATION (74-1032)																									
844	CALIB FIXTURE PRELIMINARY DESIGN																									
845	CALIB FIXT INTERNAL DESIGN REVIEW																									
846	CALIB FIXT - PREP FOR & SUPPORT PDR																									
847	CALIB FIXTURE DETAILED DESIGN																									
848	CALIB FIXT FINAL INTERNAL DESIGN REVIEW																									
849	CALIB FIXT - PREP FOR & SUPPORT CDR																									
850	CALIB FIXT MATERIAL PROCUREMENT																									
856	MOUNTING TEMPLATES (74-1033)																									
857	MOUNTING TEMPLATES PRELIMINARY DESIGN																									
858	MTG TEMP INTERNAL DESIGN REVIEW																									
859	MTG TEMP - PREP FOR & SUPPORT PDR																									

Date: 7/31/95

Task

Progress

Critical

Critical Progress

Milestone

Milestone Complete

Baseline

Baseline Complete

↑

↑

EOS/AMSU-A & COMBINED PROGRAM DESIGN PHASE SCHEDULE

ID	Act Code	1994	1995	1
860	MOUNTING TEMPLATES DETAILED DESIGN	D20150	10/24	1
861	MTG TEMP FINAL INTERNAL DESIGN REVIEW	D20200	3/9	
862	MTG TEMP - PREP FOR & SUPPORT CDR	D20250	8/10	8/10
863	MTG TEMP MATERIAL PROCUREMENT	D20300	11/1	11/30
864	MOUNTING TEMPLATES FABRICATION	D20350	11/27	2/21
865	MOUNTING TEMPLATES INSPECTION	D20400	2/22	3/27
869	DESIGN ASSURANCE - SYSTEM SAFETY (83-1110)			3/28
871	PRELIMINARY HAZARD ANALYSIS - CDRL 106	D21000	8/12	4/23
873	FINAL HAZARD ANALYSIS - CDRL 106	D21050	2/27	TBD
875	PRELIM WORK - SAFETY COMPLIANCE PACKAGE - CDRL 224	D21100	3/20	4/27
878	DESIGN ASSURANCE - PARTS CONTROL (83-1120)			
881	PRELIMINARY CRITICAL ITEM LIST - CDRL 507	D21600	8/26	
883	FINAL CRITICAL ITEM LIST - CDRL 507	D21650	2/27	TBD
885	PARTS & DEVICES STRESS ANALYSIS - CDRL 109	D21700	7/25	
886	DPA UPDATE - CDRL 403	D21710	8/1	8/26
888	PRELIM AS DESIGNED PARTS LIST (1ST UPDATE) - CDRL 527	D21725	8/29	
890	PRELIM AS DESIGNED PARTS LIST (2ND UPDATE) - CDRL 527	D21730	1/3	6/19
892	PRELIM AS DESIGNED PARTS LIST (3RD UPDATE) - CDRL 527	D21740	6/20	10/19
894	DESIGN ASSURANCE - RELIABILITY (83-1140)			
896	PAIP UPDATE	D21800	8/1	11/23
898	WORST CASE ANALYSIS 2 - CDRL 112	D21850	8/26	11/21

Date: 7/31/95

Task

Progress

Critical

Critical Progress

Milestone

Milestone Complete

Baseline

Baseline Complete

EOS/AMSU-A & COMBINED PROGRAM DESIGN PHASE SCHEDULE

ID	Act Code	1994												1995												1
		Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	
900	PRELIMINARY FMEA - CDRL 108																									
902	FINAL FMEA - CDRL 108																									
903	PRELIM RELIABILITY ASSESSMENT - MEMO																									
906	FINAL RELIABILITY ASSESSMENT - CDRL 110																									
906	PRELIM LIMITED LIFE ITEMS LIST - CDRL 504																									
907	FINAL LIMITED LIFE ITEMS LIST - CDRL 504																									

Task		Critical Progress		Baseline	
Progress					
Critical					

Date: 7/31/95

APPENDIX B

RECEIVER SUBSYSTEM
MM&T ATP TEST RESULTS

3.2.1.1 Input Voltage & Current*

Temperature (degrees C)	Current (mA)		Frequency (GHz)	Output Power (dBm)
	15 Volts	-15 Volts		
-10	504	57	57.2902990	17.48
-1	509	58	57.2903350	17.76
20	518	60	57.2903387	18.14
42	530	62	57.2903793	18.24
50	531	62	57.2904267	18.24

* The 500mA limit in the product specification did not include the TCXO that is now integrated into the PLO. The DC-DC can deliver 800 mA, so the additional 30 ma or so should not present a problem. The PLO spec will be modified.

3.2.1.3 Start-Up

The unit was raised to 60°C, the power was cycled, and then slowly cooled. After 7 minutes at 50°C the unit required lock. The unit was then lowered to -30°C, the power was cycled, and then slowly heated. After 7.5 minutes at -10°C the required lock.

3.2.1.4/3.2.1.5.2 Oscillator Frequency/ Oscillator Frequency vs. Temperature

Temperature (degrees C)	Current (mA)		Frequency (GHz)	Output Power (dBm)
	15 Volts	-15 Volts		
-10	504	57	57.2902990	17.48
-1	509	58	57.2903350	17.76
20	518	60	57.2903387**	18.14
42	530	62	57.2903793	18.24
50	531	62	57.2904267	18.24

** For flight units the TCXO resistor can set the frequency closer than the 5.3 kHz of the current TCXO.

3.2.1.5.3 Output Frequency vs. 15 volt Supply Voltage

At 20°C the unit's power supplies(+15v, -15v) were varied $\pm 1\%$. The output frequency remained 57.2903387 GHz and the output power remain 18.14 dBm for all voltage conditions.

3.2.1.12 Harmonics

The 2nd harmonic (114.58 GHz) is 43.34 dB below the 57.290 GHz signal.

4.4.1.1 Thermal-Vac Test

Has not been conducted at this time.

4.4.1.2 Random Vibration

The PLO unit was vibration tested along the axis shown in figure 1. The functional parameters test prior to and after each vibration of the unit were output frequency, and the current draw of the ± 15 volt supplies.

Initial Measurements:

Output Frequency (GHz):	57.290332
+15 Volt Current Draw (mA):	524
-15 Volts Current Draw (mA):	61

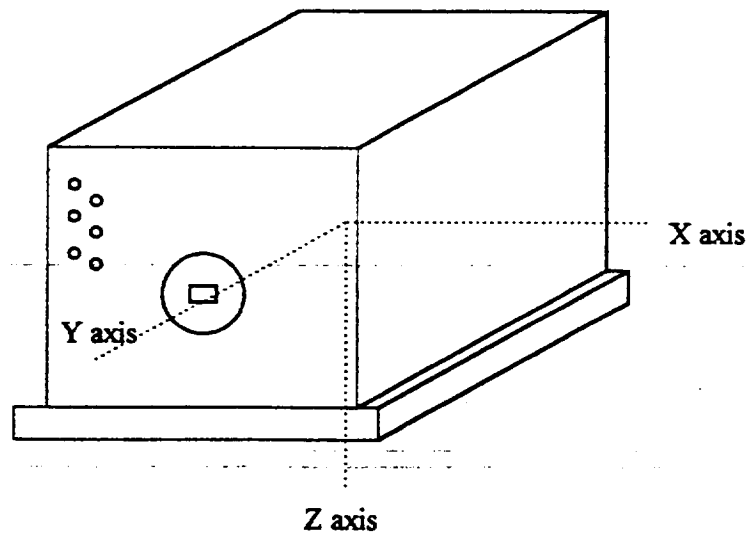


Figure 1

The vibration levels were the EOS qualification levels of, 19.96g RMS from 5Hz to 2KHz with a maximum acceleration of 59.88g. The vibration table required three minutes to ramp up to the qualification levels and then remained at the qualification level for on minute. The output frequency and current draws were recorded after each axis was tested.

After X axis vibration:	Output Frequency (GHz):	57.290332
	+15 Volt Current Draw (mA):	524
	-15 Volts Current Draw (mA):	61
After Y axis vibration:	Output Frequency (GHz):	57.290332
	+15 Volt Current Draw (mA):	524
	-15 Volts Current Draw (mA):	61
After Z axis vibration:	Output Frequency (GHz):	57.290332
	+15 Volt Current Draw (mA):	524
	-15 Volts Current Draw (mA):	61

		Report Documentation Page	
1. Report No. ---	2. Government Accession No. ---	3. Recipient's Catalog No. ---	
4. Title and Subtitle Earth Observing System/Advanced Microwave Sounding Unit -A (AMSU-A), Monthly Report		5. Report Date August 1995	
		6. Performing Organization Code ---	
7. Author(s) William Mullooly		8. Performing Organization Report No. 10300-23, July 1995	
		10. Work Unit No. ---	
9. Performing Organization Name and Address Aerojet 1100 W. Hollyvale Azusa, CA 91702		11. Contract or Grant No. NAS 5-32314	
		13. Type of Report and Period Covered Final	
12. Sponsoring Agency Name and Address NASA Goddard Space Flight Center Greenbelt, Maryland 20771		14. Sponsoring Agency Code ---	
15. Supplementary Notes ---			
16. ABSTRACT (Maximum 200 words) This is the thirty-first monthly report for the Earth Observing System (EOS)/ Advanced Microwave Sounding Unit -A (AMSU-A), Contract NAS5-32314, and covers the period from 1 July 1995 through 31 July 1995. This period is the nineteenth month of the Implementation Phase which provides for the design, fabrication, assembly, and test of the first EOS/AMSU-A, the Protoflight Model. Included in this report is the Master Program Schedule (Section 2), a report from the Product Team Leaders on the status of all major program elements (Section 3), Drawing status (Section 4), Weight and Power Budgets (CDRL) 503 (Section 5), Performance Assurance (CDRL 204) (Section 6), Configuration Management Status Report (CDRL 203) (Section 7), Documentation/Data Management Status Report (Section 8), and Contract Status (Section 9).			
17. Key Words (Suggested by Author(s)) EOS Microwave System		18. Distribution Statement Unclassified — Unlimited	
19. Security Classif. (of this report) Unclassified	20. Security Classif. (of this page) Unclassified	21. No. of pages	22. Price ---

NASA FORM 1626 OCT 86

PREPARATION OF THE REPORT DOCUMENTATION PAGE

The last page of a report facing the third cover is the Report Documentation Page, RDP. Information presented on this page is used in announcing and cataloging reports as well as preparing the cover and title page. Thus, it is important that the information be correct. Instructions for filling in each block of the form are as follows:

Block 1. Report No. NASA report series number, if preassigned.

Block 2. Government Accession No. Leave blank.

Block 3. Recipient's Catalog No. Reserved for use by each report recipient.

Block 4. Title and Subtitle. Typed in caps and lower case with dash or period separating subtitle from title.

Block 5. Report Date. Approximate month and year the report will be published.

Block 6. Performing Organization Code. Leave blank.

Block 7. Authors. Provide full names exactly as they are to appear on the title page. If applicable, the word editor should follow a name.

Block 8. Performing Organization Report No. NASA installation report control number and, if desired, the non-NASA performing organization report control number.

Block 9. Performing Organization Name and Address. Provide affiliation (NASA program office, NASA installation, or contractor name) of authors.

Block 10. Work Unit No. Provide Research and Technology Objectives and Plants (RTOP) number.

Block 11. Contract or Grant No. Provide when applicable.

Block 12. Sponsoring Agency Name and Address. National Aeronautics and Space Administration, Washington, D.C. 20546-0001. If contractor report, add NASA installation or HQ program office.

Block 13. Type of Report and Period Covered. NASA formal report series; for Contractor Report also list type (interim, final) and period covered when applicable.

Block 14. Sponsoring Agency Code. Leave blank.

Block 15. Supplementary Notes. Information not included

elsewhere: affiliation of authors if additional space is required for Block 9, notice of work sponsored by another agency, monitor of contract, information about supplements (file, data tapes, etc.) meeting site and date for presented papers, journal to which an article has been submitted, note of a report made from a thesis, appendix by author other than shown in Block 7.

Block 16. Abstract. The abstract should be informative rather than descriptive and should state the objectives of the investigation, the methods employed (e.g., simulation, experiment, or remote sensing), the results obtained, and the conclusions reached.

Block 17. Key Words. Identifying words or phrases to be used in cataloging the report.

Block 18. Distribution Statement. Indicate whether report is available to public or not. If not to be controlled, use "Unclassified-Unlimited." If controlled availability is required, list the category approved on the Document Availability Authorization Form (see NHB 2200.2, Form FF427). Also specify subject category (see "Table of Contents" in a current issue of STAR) in which report is to be distributed.

Block 19. Security Classification (of the report). Self-explanatory.

Block 20. Security Classification (of this page). Self-explanatory.

Block 21. No. of Pages. Count front matter pages beginning with iii, text pages including internal blank pages, and the RDP, but not the title page or the back of the title page.

Block 22. Price Code. If Block 18 shows "Unclassified-Unlimited," provide the NTIS price code (see "NTIS Price Schedules" in a current issue of STAR) and at the bottom of the form add either "For sale by the National Technical Information Service, Springfield, VA 22161-2171" or "For sale by the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402-0001," whichever is appropriate.

REPORT DOCUMENTATION PAGE			Form Approved OMB No. 0704-0188	
Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503.				
1. AGENCY USE ONLY (Leave blank)		2. REPORT DATE		3. REPORT TYPE AND DATES COVERED
4. TITLE AND SUBTITLE Earth Observing System/Advanced Microwave Sounding Unit (EOS/AMSU-A), Monthly Report			5. FUNDING NUMBERS NAS 5-32314	
6. AUTHOR(S) William Mullooly				
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) Aerojet 1100 W. Hollyvale Azusa, CA 91702			8. PERFORMING ORGANIZATION REPORT NUMBER CDRL 529 10300-23 August 1995	
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES) NASA Goddard Space Flight Center Greenbelt, Maryland 20771			10. SPONSORING/MONITORING AGENCY REPORT NUMBER ---	
11. SUPPLEMENTARY NOTES ---				
12a. DISTRIBUTION/AVAILABILITY STATEMENT ---			12b. DISTRIBUTION CODE ---	
13. ABSTRACT (Maximum 200 words) This is the thirty-first monthly report for the Earth Observing System (EOS)/ Advanced Microwave Sounding Unit -A (AMSU-A), Contract NAS5-32314, and covers the period from 1 July 1995 through 31 July 1995. This period is the nineteenth month of the Implementation Phase which provides for the design, fabrication, assembly, and test of the first EOS/AMSU-A, the Protoflight Model. Included in this report is the Master Program Schedule (Section 2), a report from the Product Team Leaders on the status of all major program elements (Section 3), Drawing status (Section 4), Weight and Power Budgets (CDRL) 503 (Section 5), Performance Assurance (CDRL 204) (Section 6), Configuration Management Status Report (CDRL 203) (Section 7), Documentation/Data Management Status Report (Section 8), and Contract Status (Section 9).				
14. SUBJECT TERMS EOS Microwave System			15. NUMBER OF PAGES 15	
			16. PRICE CODE ---	
17. SECURITY CLASSIFICATION OF REPORT Unclassified	18. SECURITY CLASSIFICATION OF THIS PAGE Unclassified	19. SECURITY CLASSIFICATION OF ABSTRACT Unclassified	20. LIMITATION OF ABSTRACT SAR	

GENERAL INSTRUCTIONS FOR COMPLETING SF 298

The Report Documentation Page (RDP) is used in announcing and cataloging reports. It is important that this information be consistent with the rest of the report, particularly the cover and title page. Instructions for filing in each block of the form follow. It is important to stay within the lines to meet optical scanning requirements.

Block 1. Agency Use Only. (Leave blank)

Block 2. Report Date. Full publication date including day, month, and year, if available (e.g., 1 Jan 88). Must cite at least the year.

Block 3. Type of Report and Dates Covered. State whether report is interim, final, etc. If applicable, enter inclusive report dates (e.g., 10 Jun 87 - 30 Jun 88).

Block 4. Title and Subtitle. A title is taken from the part of the report that provides the most meaningful and complete information. When a report is prepared in more than one volume, report the primary title, add volume number, and include subtitle for the specific volume. On classified documents enter the title classification in parentheses.

Block 5. Funding Numbers. To include contract and grant numbers; may include program element number(s), project number(s), tasks number(s), and work unit number(s). Use the following labels:

C	-	Contract	PR	-	Project
G	-	Grant	TA	-	Task
PE	-	Program	WU	-	Work Unit
		Element			Accession No.

Block 6. Author(s). Name(s) of person(s) responsible for writing the report, performing the research, or credited with the content of the report. If editor or compiler, this should follow the name(s).

Block 7. Performing Organization Name(s) and Address(es). Self-explanatory.

Block 8. Performing Organization Report Number. Enter the unique alphanumeric report number(s) assigned by the organization performing the report.

Block 9. Sponsoring/Monitoring Agency Name(s) and Address(es). Self-explanatory.

Block 10. Sponsoring/Monitoring Agency Reports Number. (if known).

Block 11. Supplementary Notes. Enter information not included elsewhere such as: Prepared in cooperation with ...; Trans. of ...; To be published in ... When a report is revised, include a statement whether the new report supersedes or supplements the older report.

Block 12a. Distribution/Availability Statement. Denotes public availability or limitations. Cite any availability to the public. Enter additional limitations or special markings in all capitals (e.g., NOFORN, REL, ITAR).

DOD - See DoDD 5230.24 "Distribution Statement on Technical Documents"

DOE - See authorities.

NASA - See Handbook NHB 2200.2.

NTIS - Leave blank.

Block 12.b. Distribution Code.

DOD - Leave blank.

DOE - Enter DOE distribution categories from the standard Distribution for Unclassified Scientific and Technical Reports.

NASA - Leave blank.

NTIS - Leave blank.

Block 13. Abstract. Include a brief (Maximum 200 words) factual summary of the most significant information contained in the report.

Block 14. Subject Terms. Keywords or phrases identifying major subjects in the report.

Block 15. Number of Pages. Enter the total number of pages.

Block 16. Price Code. Enter appropriate price code (NTIS only).

Block 17 - 19. Security Classifications. Self-explanatory. Enter U.S. Security Classification in accordance with U.S. Security Regulations (i.e., UNCLASSIFIED). If form contains classified information, stamp classification on the top and bottom of the page.

Block 20. Limitation of Abstract. This block must be completed to assign a limitation to the abstract. Enter either UL (unlimited) or SAR (same as report). An entry in this block is necessary if the abstract is to be limited. If blank, the abstract is assumed to be unlimited.

Standard Form 298 Back (Rev. 2-89)